Input/Output Connectors Index

Table of Contents

Section One: Input/Output Connector

Click Below

Input/Output Connectors (Continued)

HDP-22, Subminiature D, Crimp Snap-In Contact Plug Housings

Material and Finish

Shell — Steel, tin plated

Insert — Thermoplastic, 94V-0 rated, black

Shell Size	No. of Pos.	Part Numbers		
		Plug	Receptacle	Receptacle[1]
1	15	748364-1	748565-1	748696-1
2	26	748365-1	748566-1	—
3	44	748366-1	748567-1	—
4	62	748367-1	748568-1	—
5	78	748368-1	748569-1	—

[1]With clinch nuts.

Notes: Plugs accept Size 22 DF pin contacts, and receptacles accept Size 22 DF socket contacts.

Contacts and ferrules must be ordered separately, see below and page 21.

Receptacle

HDP-22, Subminiature D, Crimp Snap-In Contact Connector, Shielding Hardware Kits

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — Thermoplastic, 94V-0 rated, black

Shields — Steel, tin plated

Each kit contains:
Connector, Inner Shield and Outer Shield

Shell Size	No. of Pos.	Kit Numbers	
		Plug	Receptacle
1	15	748468-1	748634-1
2	26	748469-1	748635-1
3	44	748470-1	–
4	62	748471-1	–
5	78	748472-1	–

Notes:
1. Plugs accept Size 22 DF pin contacts, and receptacles accept Size 22 DF socket contacts.
2. Components of the kits are shipped unassembled and bulk-packaged in quantities of 100 pieces.
3. Contacts and ferrules must be ordered separately, see below and page 21.

Plug Hardware Kit — Receptacle Hardware Kit

HDP-22, Subminiature D, Crimp Snap-In Contact Connector, Shielding Hardware, Enclosure Kits

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — Thermoplastic, 94V-0 rated, black

Shields — Steel, tin plated

Each kit contains:
Connector, Inner Shield, Outer Shield, Enclosure and Two Jackscrews

Shell Size	No. of Pos.	Part Numbers	
		Plug	Receptacle
1	15	748473-1	748639-1
2	26	748474-1	748640-1
3	44	748475-1	748641-1
4	62	748476-1	–
5	78	748477-1	–

Notes:
1. Plugs accept Size 22 DF pin contacts, and receptacles accept Size 22 DF socket contacts.
2. Components of the kits are shipped unassembled and bulk-packaged in quantities of 100 pieces.
3. Contacts and ferrules must be ordered separately, see below and page 21.

Plug Enclosure Kit

Receptacle Enclosure Kit

Precision Formed Crimp, Snap-in Contacts, Size 22 DF, Wire Size 28-22 AWG [0.4-0.08 mm²], Insulation Diameter .400 [1.02] max.

Material and Finish

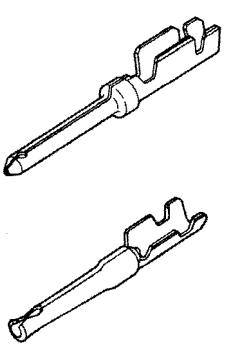
Pin Contact — Brass

Socket Contact — Phosphor Bronze

Plating:
A. .000030 [0.00076] min. gold on mating end, tin-lead on crimp barrel, all nickel underplate

B. Gold flash on mating end, tin-lead on crimp barrel, all nickel underplate

Plating Code	Part Numbers			
	Pin		Socket	
	Strip	Loose	Strip	Loose
A	748333-2	748333-4	748610-2	748610-4



Pin

Socket

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

HDP-20, Subminiature D, Crimp Snap-In Contact Housings

Material and Finish

Shell — Steel, tin or zinc plated

Insert — Thermoplastic, 94V-0 rated, black

Contacts and Ferrules must be ordered separately, see pages 17 and 21

Clinch Nut

Shell Size	No.of Pos.	Plug Part Numbers		
		Zinc Plate	Tin Plate w/o Grd.	Tin Plate W/Grd.
1	9	205204-1	205204-3	205204-4
1[1]	9	–	–	745906-2
2	15	205206-1	205206-2	205206-3
2[1]	15	–	745908-1	745908-2
3	25	205208-1	207464-1	207464-2
3[1]	25	–	–	745036-2
4	37	205210-1	205210-2	205210-3
4[1]	37	–	–	745135-2
5	50	205212-1	205212-2	205212-3

Plug

Shell Size	No.of Pos.	Receptacle Part Numbers	
		Zinc Plate	Tin Plate
1	9	205203-1	205203-3
1[1]	9	–	745907-1
2	15	205205-1	205205-2
3	25	205207-1	207463-1
3[1]	25	–	207516-3
4	37	205209-1	205209-2
4[1]	37	–	207661-3
5	50	205211-1	205211-2

[1]Clinch nut mounting with M-3 threads.

Receptacle

HDP-20, Subminiature D, Crimp Snap-In Contact Connector, Shielding Hardware Kits

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — Thermoplastic, 94V-0 rated, black

Shields — Steel, tin plated

Each kit contains:
Connector, Inner Shield and Outer Shield

Shell Size	No. of Pos.	Kit Numbers	
		Plug	Receptacle
1	9	747952-1	747951-1
2	15	747954-1	747953-1
3	25	747956-1	747955-1
4	37	747958-1	747957-1
5	50	747960-1	–

Notes:
1. Plugs accept Size 20 DF pin contacts, and receptacles accept Size 20 DF socket contacts.
2. Components of the kits are shipped unassembled and bulk-packaged in quantities of 100 pieces.
3. Contacts and Ferrules must be ordered separately, see pages 17 and 21.

Plug Hardware Kit

Receptacle Hardware Kit

HDP-20, Subminiature D, Crimp Snap-In Contact Connector, Shielding Hardware, Enclosure Kits

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — Thermoplastic, 94V-0 rated, black

Shields — Steel, tin plated

Each kit contains:
Connector, Inner Shield, Outer Shield, Enclosure and Two Jackscrews

AMPLIMITE HDP-20 RS-232 Repair Kit Part No. 787053-2 (Includes Crimping Tool)

Shell Size	No. of Pos.	Kit Numbers	
		Plug	Receptacle
1	9	747522-1	747523-1
1[1]	9	748526-1	748536-1
2	15	747538-1	747539-1
3	25	747554-1	747555-1
4	37	–	747571-1
4[1]	37	–	749763-1
5	50	747577-1	747578-1

[1]Clinch nut mounting with M-3 threads.

Notes:
1. Plugs accept Size 20 DF pin contacts, and receptacles accept Size 20 DF socket contacts.
2. Components of the kits are shipped unassembled and bulk-packaged in quantities of 100 pieces.
3. Contacts and Ferrules must be ordered separately, see pages 17 and 21.

Plug Enclosure Kit

Receptacle Enclosure Kit

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Input/Output Connectors (Continued)

Precision Formed Crimp, Snap-in Contacts, Size 20 DF, Wire Size 28-22 AWG [0.4-0.08 mm²], Insulation Dia. 0.40 [1.02] max.

Material and Finish

Pin Contact — Brass

Socket Contact — Phosphor Bronze

Plating:

A— Gold flash on mating end, tin-lead on crimp barrel, all nickel underplate

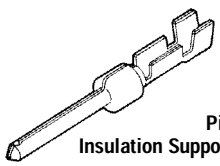
B— .000030 [0.00076] min. gold on mating end, tin-lead on crimp barrel, all nickel underplate

C— Gold flash over nickel on entire contact

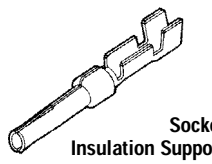
D— Gold flash on mating end, tin-lead on termination end, with entire contact-nickel underplate

Contacts with Insulation Support

Wire Size AWG [mm²]	Ins. Dia. Max.	Pl. Code	Part Numbers			
			Pin		Socket	
			Strip	Loose	Strip	Loose
28-24 0.08-0.2	.040 1.02	A	66507-3	66507-9	66505-3	66505-9
		B	3-66507-0	5-66507-7	6-66505-0	6-66505-2
		C	66507-4	1-66507-0	66505-4	1-66505-0
		D	3-66507-1	–	5-66505-7	5-66505-9
	.060 1.52	A	66682-2	66682-4	66683-2	66683-4
		B	66682-9	1-66682-1	1-66683-0	–
		D	66682-6	–	66683-7	–
26-22 0.15-0.4	.050 1.27	A	745254-2	745254-6	745253-2	745253-6
		B	1-745254-4	1-745254-6	1-745253-4	1-745253-6
		C	745254-3	745254-7	745253-3	745253-7
		D	1-745254-1	1-745254-3	1-745253-1	1-45253-3
24-20 0.2-0.6	.060 1.52	A	66506-3	66506-9	66504-3	66504-9
		B	2-66506-4	5-66506-7	5-66504-9	6-66504-0
		C	66506-4	1-66506-0	66504-4	1-66504-0
		D	2-66506-5	5-66506-9	5-66504-6	–



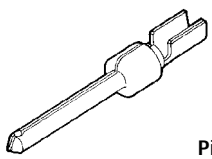
Pin
Insulation Support



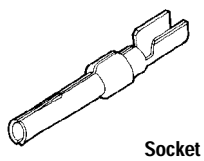
Socket
Insulation Support

Contacts without Insulation Support

Wire Size AWG [mm²]	Ins. Dia. Max.	Pl. Code	Part Numbers	
			Pin	Socket
			Strip	Strip
28-24 0.08-0.2	.068 1.73	A	205310-2	–
24-20 0.2-0.6	.068 1.73	A	205202-2	205201-3
		C	205202-6	205201-6
22-18 0.4-0.8	.068 1.73	A	745229-2	745230-2
		B	1-745229-1	1-745230-1
		C	–	745230-5



Pin
Non-Insulation Support



Socket
Non-Insulation Support

Precision Formed Square Posted Snap-In Contacts, Size 20 DF, Pin Diameter .040 [1.02], .025 [0.64] Square Post

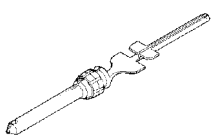
Material and Finish

Pin — Brass

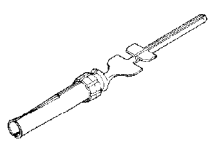
Socket — Phosphor Bronze, both plated gold flash over nickel on the entire contact, with additional .000030 [0.00076] min. gold on the mating end

Contact Finish (Plating	Post Length[1]					
	.125 [3.18]	.188 [4.78]	.427 [10.65]		.651 [16.54]	
	Socket	Pin	Pin	Socket	Pin	Socket
A	745288-4	2-745287-0	745287-8	745288-8	1-745287-2	1-745288-2
B	–	1-745287-8	745287-6	745288-6	1-745287-0	1-745288-0

[1]Length of post extending from rear of HDP-20 metal shell connector.



Pin



Socket

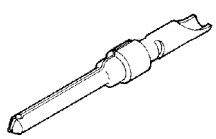
Solder Cup Contact, Size 20 DF,Pin Dia. .040 [1.02]

Material and Finish

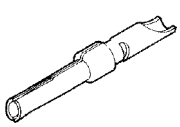
Pin — Brass

Socket — Phosphor Bronze, both plated gold flash over nickel on the entire contact, with additional .000030 [0.00076] min. gold on the mating end

Part Numbers		
Pin		Socket
Loose	Strip	Loose
66570-3	66570-2	66569-3



Pin Solder Cup



Socket Solder Cup

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Input/Output Connectors (Continued)

HDF-20 Low Profile Metal-Shell Connectors (for Flat Ribbon Cable)

Material and Finish

Front Shell — Steel, tin plated
Housing, Cover & Cable Stabilizer — Black thermoplastic, 94V-0 rated
Threaded Inserts — Brass, unplated
Contacts — Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, entire contact underplated .000050 [0.00127] min. nickel

Notes:
1. Plug Assemblies(with Grounding Indents).
2. See Section 3 for other ribbon cable products.

No. of Pos. & (Shell Size)	Cable Stabilizer	Plug Part Nos. With Standard Mounting Holes	Plug Part Nos. With Threaded Inserts
9 (1)	747275-4	747306-4	747043-4
15 (2)	747275-3	747306-3	747043-3
25 (3)	747275-2	747306-2	747043-2
37 (4)	747275-1	747306-1	747043-1
50 (5)	746785-1	–	746790-1

Note: All assemblies are supplied with housing and cover pre-assembled. Optional cable stabilizer must be ordered separately.

Plug

No. of Pos. & (Shell Size)	Cable Stabilizer	Receptacle Part Nos. With Standard Mounting Holes	Receptacle Part Nos. With Threaded Inserts
9 (1)	747275-4	747303-4	747052-4
15 (2)	747275-3	–	–
25 (3)	747275-2	747303-2	747052-2
37 (4)	747275-1	–	–
50 (5)	746785-1	–	746789-1

Note: All assemblies are supplied with housing and cover pre-assembled. Optional cable stabilizer must be ordered separately.

Receptacle

HDF-20 Low Profile All Plastic Connectors (for Flat Ribbon Cable)

Material and Finish

Housing, Cover & Cable Stabilizer — Black thermoplastic, 94V-0 rated
Threaded Inserts — Brass, unplated
Contacts — Phosphor Bronze, duplex plated .000030 [0.00076] min. gold on mating end, .000100-.000200 [0.00254-0.00508] min. bright tin-lead on termination end, entire contact underplated .000050 [0.00127] min. nickel

Note: See Section 3 for other ribbon cable products.

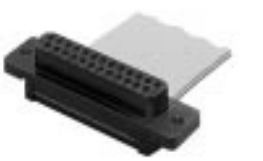
No. of Pos. & (Shell Size)	Cable Stabilizer	Plug Part Nos. With Standard Mounting Holes	Plug Part Nos. With Threaded Inserts
9 (1)	747275-4	747321-4	747053-4
15 (2)	747275-3	747321-3	–
25 (3)	747275-2	747321-2	747053-2
37 (4)	747275-1	747321-1	747053-1

Note: All assemblies are supplied with housing and cover pre-assembled. Optional cable stabilizer must be ordered separately.

Plug

No. of Pos. & (Shell Size)	Cable Stabilizer	Receptacle Part Nos. With Standard Mounting Holes	Receptacle Part Nos. With Threaded Inserts
9 (1)	747275-4	747318-4	747051-4
15 (2)	747275-3	747318-3	747051-3
25 (3)	747275-2	747318-2	747051-2
37 (4)	747275-1	747318-1	–

Note: All assemblies are supplied with housing and cover pre-assembled. Optional cable stabilizer must be ordered separately.



Receptacle

9-Position, HDJ-20 All-Plastic Jacketed Cable Connectors

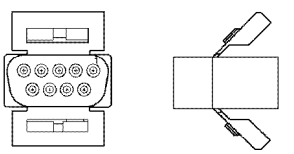
(for Crimp, Snap-In Contacts)

Material — Thermoplastic, black

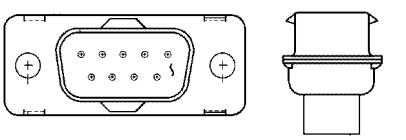
Cord Guards:
Standard and Squeeze-to-Release

Contacts must be ordered separately, see page 17

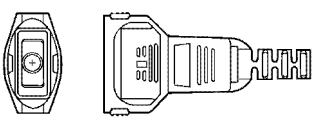
Receptacle Part No. 207752-3



Plug Part No. 245018-1



Inside Dia.	Standard Part No.	Squeeze-to-Release Part No.
.234 5.94	207753-1	—
.200 5.08	—	745002-1



Squeeze-to-Release Cord Guard (Shown)

Male Screw Retainers for Metal-Shell Connectors (HDP-20)

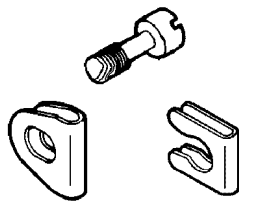
Material and Finish

Male Screw — Steel, zinc plated clear or yellow chromate

Retention Clip — .012 [0.51] stainless steel

Screw Finish	Thread Size	Retainer Kit No. Individual	Retainer Kit No. Bulk
Yellow Chromate	4-40	205980-1[2]	205980-3[2]
		745136-1[1]	745136-2[1]
—	M3	207871-1[3]	—
Clear Chromate	4-40	205980-4[2]	205980-5[2]
		245136-3[1]	–

[1]Screw length .200 [5.08]
[2]Screw length .220 [5.59]
[3]Screw length .225 [5.72]



205980 Series 745136 Series

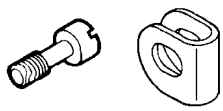
Male Screw Retainers for Metal-Shell and All-Plastic Connectors (HDF) and All-Plastic (HDE)

HDF

Part No. 746881-1
(Individually packed)
Part No. 746881-2
(Bulk packed)

HDE

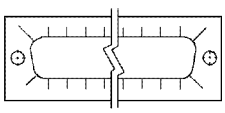
Part No. 745647-1
(Individually packed)
Part No. 745647-2
(Bulk packed)



EMI/RFI Gaskets

Material and Finish

Brass, .006 [0.15] thick, plated bright tin



Shell Size	No. of Pos.	Gasket Part Number
1	9	747024-3
2	15	747025-3
3	25	745776-3
4	37	745777-3

Female Screwlocks for Metal-Shell and All-Plastic Connectors (HDE, HDF, HDP)

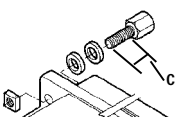
Material and Finish

All Parts — Cold rolled steel, zinc plated clear or yellow chromate

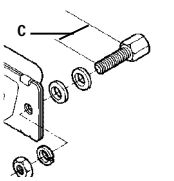
Plugs and Recpt. Used with	Style	Dimension C	Thread Size	Kit Number Individual	Kit Number Bulk Packed
HD All-Plastic Right-Angle	(A)	**.250** [6.35]	4-40	207952-1[1]	–
HD All-Plastic Right-Angle	(A)	**.250** [6.35]	4-40	207952-3	–
HDE Metal-Shell or All-Plastic	(B)	**.250** [6.35]	4-40	745563-1[1]	745563-2
HDE Metal-Shell or All-Plastic	(B)	**.250** [6.35]	4-40	745563-3	745563-4
HDP or HDP Metal-Shell	(B)	**.312** [7.93]	Metric M2.6	749765-3	—
			4-40	205817-1[1]	205817-2[1]
				205817-3	205817-4
			Metric M3	207872-1[1]	–
				207872-3	–
HD or HDF All-Plastic with Integral Standoffs	(B)	**.560** [14.22]	4-40	207719-1[1]	–
				207719-3	207719-4
			2-56	747223-3	–

[1]Yellow chromate finish, all others clear chromate finish.

Style A



Style B



Individual Screwlocks
(Washers & Nuts not included)

Material and Finish

All Parts — Cold rolled steel, zinc plated clear chromate

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Connector Used with	Style	Dimension C	Thread Size	Screwlocks Finish	Screwlocks Individual
HDP or HDF Metal Shell or All-Plastic Plugs and Receptacles	Special	.185 [4.70]	4-40	Clear Chromate	747877-3
	B	.312 [4.70]	Metric M3	Clear Chromate	747404-3
	B	.312 [7.93]	4-40	Yellow Chromate	748270-2

Input/Output Connectors (Continued)

Slide Latches

Material and Finish

Slide Latches — Stainless Steel

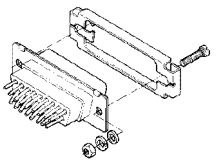
4-40 Screws, Washers and Hex Nuts — Steel, zinc plated yellow chromate

2-56 Screws, Washers and Hex Nuts — Steel, zinc plated clear chromate

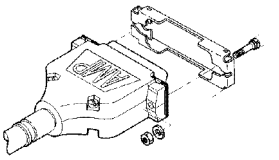
Shell Size	Style	Slide Latch Kit Numbers[1]
1	I	745404-1
2	II	745583-1
	III	745583-5
	III	745583-6[2]
3	II	745584-1
	III	745584-3
4	I	745407-1
5	III	745578-3

[1]Individually packaged except as noted
[1]Bulk packaged

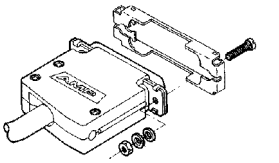
Style I
for Shell Sizes 1 and 4



Style II
for Shell Sizes 2, 3 and 5



Style III
for Shell Sizes 2, 3 and 5



Slide Latch Clip Assembly for Unfiltered Mating Half

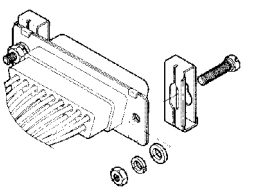
Material and Finish

Screw, Washers and Hex Nut — Cold rolled steel, zinc plated per QQ-Z-325

Clip — Stainless steel

Thread Size	Screw Length	Part Number	
		Standard	Bulk Pack
4-40	**.415** 10.14	206942-1[1]	209942-2
2-56	**.547** 13.89	748078-1	—

[1]Two assemblies per package

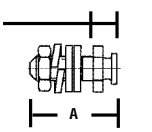


Locking Post Assembly

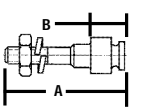
Material and Finish

All Parts — Cold rolled steel, zinc plated yellow chromate

Thread Size	Locking Post Finish	Dimensions		Locking Post Kit No.	
		A	B	Individual	Bulk Packed
4-40	Yellow Chromate	**.410** 10.41	**.110** 2.79	206514-1	206514-3
		.560 14.22	**.110** 2.79	206514-6	206514-7
2.56	Yellow Chromate	**.615** 15.62	**.172** 4.37	747242-1	–
	Clear Chromate	**.615** 15.62	**.172** 4.37	742242-3	–



Part No. 206514-X



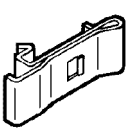
Part No. 747242-X

Spring Latches for Cable Clamps with Mounting Ears (Two-Piece)

Material

Stainless steel

Part No. 745255-2 (Two/Pack)
Part No. 745255-3 (BulkPacked)

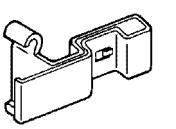


Standard Spring Latches

Material

Stainless Steel

Shell Size 1-4:
Part No. 745779-2 (Two/Pack)
Part No. 745779-3 (Bulk Packed)



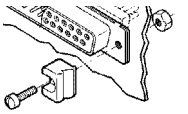
Latching Blocks with Slot Recess and Thru-Hole

Material and Finish

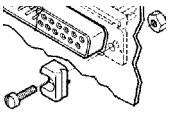
Zinc

Part No. 747080-2[1] (Individual Pack)

[1]For Shell Sizes 1 thru 4



Front Mount



Rear Mount

Rear Panel Latching Block		Front Panel Latching Block		Panel
Individual	Bulk Packed	Individual	Bulk Packed	Thickness
747080-2	–	–	–	.090 [2.29]
745245-2	745245-3	–	–	.060 [1.52]
–	–	745286-2	745286-3	–

Latching Blocks, Front Panel Mount with 4-40 Threaded Holes

Material and Finish

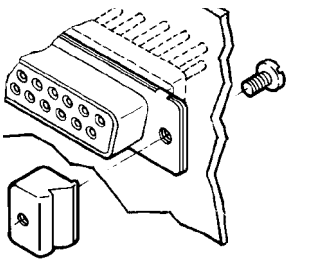
Zinc

Pan Head Screws — Steel, zinc plated

Part No. 208101-9[1] (Bulk Packed)

[1]For Shell Sizes 1 thru 4

Dim. B	Thread Size	Rear Panel Latching Block Individual	Front Panel Latching Block Individual	Front Panel Latching Block Bulk Packed
.190 4.83	M3 Metric	745403-1	—	—
	4-40	745403-8	–	–
.220 5.59	4-40	747717-2	–	–
.250 6.35	M3 Metric	–	208101-1	–
	4-40		208101-8	208101-9



Ferrules for Shielding Hardware Kits

Material and Finish

Steel (annealed), tin plated

Shell Sizes	Style	Cable Diameter	Part Numbers
1-3	Stepped	.165-.246 [4.19-6.25]	747579-8
1-3	Stepped	.246-.324 [6.25-8.23]	1-747579-0
1-3	Stepped	.324-.375 [8.23-9.53]	1-747579-1
1-3	Straight	.375-.425 [9.53-11.05]	1-747579-2
1-3	Straight	.400-.455 [10.16-11.56]	1-747579-4
4-5	Stepped	.338-.385 [8.59-10.97]	747580-8
4-5	Stepped	.375-.432 [9.53-10.97]	747580-4
4-5	Stepped	.422-.490 [10.72-12.45]	747580-5
4	Straight	.480-.562 [12.19-14.28]	747580-6

Stepped

Straight

AMPLIMITE PCB Connectors

HD-22 Front Metal-Shell Right-Angle Connectors, .350 [8.89] PCB Footprint

Material and Finish

Housing — 94V-0 thermoplastic, black

Front Shell — Steel, tin plated

Contacts — Pin: Brass, Sockets: Phosphor Bronze

Plating —

A— .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all nickel underplated

B— Gold flash on mating end, tin-lead on termination end, all nickel underplated

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Plug Shell Size	No. Pos.	Plating Code	With Boardlocks: With Threaded Inserts	With Boardlocks: With Fixed Female Screwlocks
1	15	A	749767-1	749768-1
2	26	A	749769-1	–
3	44	A	749771-1	–
4	62	A	749639-1	

Receptacle Shell Size	No. Pos.	Plating Code	With Boardlocks: With Threaded Inserts	With Boardlocks: With Fixed Female Screwlocks
▲1	15	A	787066-1	–
VESA/VGA		B	787066-2	–
1	15	A	748390-5	748390-6
		B	1-748390-1	1-748390-2
2	26	A	748481-5	748481-6
2	26	A	–	1-748481-9[1]
3	44	A	748482-5	–
4	62	A	748394-5	748394-6
5	78	A	748483-5	748483-6

▲Standard 15-position receptacle housing material: Thermoplastic 94V-0 Blue.

[1]Without boardlocks/threaded insert for .125 [3.18] dia. hole.

HD-22 Plug with 4-40 Threaded Inserts

HD-22 Plug with Female Screwlocks

HD-22 Receptacle with 4-40 Threaded Inserts

HD-22 Receptacle with Female Screwlocks

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HD-22 Front Metal-Shell Straight Posted Connectors

Material and Finish

Shell — Steel, tin plated

Insert — Thermoplastic, 94V-0, black

Contacts — Pins-Brass, Sockets-Phosphor bronze, all plated:

A— .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all over .000050 [0.00127] min. nickel underplating

Shell Size	No. of Pos.	Plt. Code	Part Numbers			
			Plug	Receptacles		
			with 4-40 Thread Inserts	with 4-40 Thread Inserts	with Retention 4-40 Inserts	with Fixed Female Screwlocks
1	15	A	749798-1[1]	749374-1	749374-3	786356-1
2	26	A	—	749030-1	—	—
4	62	A	749019-1	747786-6[1]	—	—
5	78	A	—	748831-1	—	—

[1].125 [3.18] post length for pcb .062-.093 [1.58-2.36] max.

Plug

Receptacle

HD-20 Front Metal-Shell Right-Angle Connectors, .318 [8.08] PCB Footprint

Material and Finish

Housing —Thermoplastic, 94V-0 rated, compatible with standard wave solder, black

Shell — Steel, tin plated

Contacts — Plugs - Brass, Receptacles - Phosphor Bronze

Plating Code —

A— Duplex plated .000030 [0.00076] min. gold on the mating end, tin-lead on solder end, all over nickel underplating

B— Duplex plated gold flash on the mating end, tin-lead on solder end, all over nickel underplating

Plug Shell Size	No. Pos.	Plt. Code	Without Boardlocks			With Boardlocks		
			With Std. Mtg.	With Thrd. Inserts	With Fixed Female Screwlocks	With Std. Mtg.	With Thrd. Inserts	With Fixed Female Screwlocks
1	9	A	747250-2	747250-4	747250-6	747840-2	747840-4	747840-6
		B	—	747250-3	–	–	747840-3	747840-5
2	15	A	747236-2	747236-4	–	–	747841-4	747841-6
		B	—	747236-3	–	–	747841-3	–
3	25	A	—	747238-4	747238-6	747842-2	747842-4	747842-6
		B	—	–	–	–	747842-3	747842-5
4	37	A	747252-2	747252-4	–	747843-2	747843-4	747843-6

Plug – Threads with Boardlocks

Plug – Female Screwlocks with Boardlocks

Receptacle Shell Size	No. Pos.	Plt. Code	Without Boardlocks			With Boardlocks		
			With Std. Mtg.	With Thrd. Inserts	With Fixed Female Screwlocks	With Std. Mtg.	With Thrd. Inserts	With Fixed Female Screwlocks
1	9	A	745781-2	745781-4	745781-6	747844-2	747844-4	747844-6
		B	–	745781-3	–	–	747844-3	747844-5
2	15	A	745782-2	745782-4	745782-6	747845-2	747845-4	747845-6
		B	–	–	–	–	747845-3	747845-5
3	25	A	745783-2	745783-4	745783-6	747846-2	747846-4	747846-6
		B	–	745783-3	745783-5	–	747846-3	747846-5
4	37	A	–	745784-4	745784-6	–	747847-4	747847-6

Receptacle with Threads with Boardlocks

Receptacle with Female Screwlocks with Boardlocks

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

HD-20 Front Metal-Shell Straight Posted Connectors

Material and Finish

Shell — Steel, tin plated
Housing — Thermoplastic, 94V-0, black
Threaded Inserts — Brass, unplated
Female Screwlocks — Zinc
Contacts — Pins-Brass, Sockets-Phosphor bronze, all plated:
A— .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all over .000050 [0.00127] min. nickel underplating
B— Same as A with gold flash on mating end

Input/Output Connectors (Continued)

Plugs

Shell Size	No. of Pos.	Post Length	Plating Code	Plug Part Numbers: With Std. Mounting Holes	With 4-40 Threaded Inserts	With Retention 4-40 Inserts	With Fixed Female Screwlocks
1	9	.125	A	747871-2	747871-8	2-748003-0	1-747871-4
		3.18	B	—	—	—	1-747871-3
		.170	A	747871-4	—	—	1-747871-6
		4.32					
2	15	.125	A	—	747872-8	—	—
		3.18					
		.170	A	747872-4	—	—	1-747872-6
		4.32					
3	25	.125	A	745968-2	745968-8	2-747704-3	1-745968-4
		3.18	B	—	745968-7	—	1-745968-3
		.170	A	745968-4	—	—	1-745968-6
		4.32					
4	37	.125	A	747375-2	747375-8	—	—
		3.18					

Plug w/4-40 Threaded Inserts

Plug w/Retention Insert

Plug w/Female Screwlock

Receptacles

Shell Size	No. of Pos.	Post Length	Plating Code	Receptacle Part Numbers: With Std. Mounting Holes	With 4-40 Threaded Inserts	With Retention 4-40 Inserts	With Fixed Female Screwlocks
1	9	.125	A	747150-2	747150-8	2-747706-0	1-747150-4
		3.18	B	—	747150-7	—	1-747150-3
		.170	A	747150-4	—	—	1-747150-6
		4.32	B	—	747150-9	—	—
2	15	.125	A	747299-2	747299-8	2-747707-0	1-747299-4
		3.18					
		.170	A	—	1-747299-0	—	—
		4.32					
3	25	.125	A	745697-2	745697-8	2-747708-0	1-745967-4
		3.18	B	—	745967-7	—	—
		.170	A	—	1-745967-0	—	1-745967-6
		4.32	B	—	—	—	1-745967-5
4	37	.125	A	747301-2	747301-8	2-747709-0	1-747301-4
		3.18	B	—	747301-7	—	—
		.170	A	—	—	—	1-747301-6
		4.32					

Receptacle w/Threaded Inserts

Receptacle w/Fixed Female Screwlocks

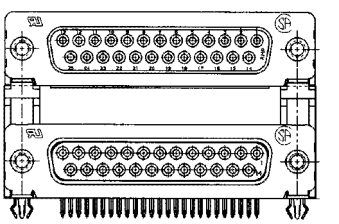
Receptacle w/Standard Mtg. Holes

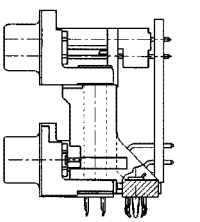
HD-20 Filtered Right Angle Stacked Connector, Front Metal Shell

Material and Finish

Shell — Steel, tin plated
Housing — Thermoplastic, 94V-0, black
PC Board — Glass epoxy, 94V-0 flame retardant
Eyelets — Brass, plated tin over copper
Threaded Inserts — Zinc
Boardlocks — Copper alloy, tin-lead plated
Contacts — Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all over .000030 [0.00076] min. nickel underplating

Receptacle over Receptacle
25-Position over 25-Position
Shell Size 3
Part No. 93544-3





BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HD-20 Front Metal-Shell Right-Angle Connectors, with Boardlocks and Threaded Inserts, .478 [12.14] PCB Footprint

Shell	No. of	Part Numbers	
		Plugs	Receptacles
1	9	747848-4	747852-4
2	15	—	747853-4
3	25	—	747854-4

Material and Finish

Housing — 94V-0 thermoplastic, black
Front Shell — Steel, tin plated
Eyelets — Brass, tin plated
Threaded Inserts — Zinc
Female Screwlock — Zinc
Boardlocks — Copper alloy, tin-lead plated
Contacts — Pin: Brass, Sockets: Phosphor Bronze
Plating —
A. .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all nickel underplated

Plug with Grounding Indents & Grounding Straps

Plug
With Threaded Inserts

Receptacle with Grounding Straps

Receptacle
With Threaded Inserts

HD-20 Front Metal-Shell Right-Angle Connectors, .590 [14.99] PCB Footprint

Material and Finish

Housing — 94V-0 thermoplastic, black
Front Shell — Steel, tin plated
Contacts — Pin: Brass, Sockets: Phosphor Bronze
Plating —
A. .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all nickel underplated

Plugs

Shell Size	No. of Pos	Plating Code	Without Boardlocks	With Boardlocks	
			With Threaded Inserts	Without Threaded Inserts	With Fixed Female Screwlocks
1	9	A	745990-4	747832-4	747832-6
		B	747990-3	747832-3	–
2	15	A	–	747833-4	–
3	25	A	–	747834-4	–
4	37	A	–	737835-4	–

HD-20 Plug with Threaded Inserts

HD-20 Plug with Female Screwlocks

Receptacles

Shell Size	No. of Pos	Plating Code	Without Boardlocks		With Boardlocks	
			With Threaded Inserts	With Fixed Female Screwlocks	Without Threaded Inserts	With Fixed Female Screwlocks
1	9	A	745988-4	745988-6	747836-4	747836-6
2	15	A	–	–	747837-4	–
3	25	A	745992-4	745992-6	747838-4	747838-6
		B	745992-3	–	747838-3	–
4	37	A	–	–	747839-4	–

HD-20 Receptacle with Threaded Inserts

HD-20 Receptacle with Female Screwlocks

HD-20 Front Metal-Shell Straight Posted Connectors with ACTION PIN Contacts

Material and Finish

Housings — 94V-0 thermoplastic, black
Threaded Inserts — Brass, unplated
Female Screwlocks — Zinc
ACTION PIN Contacts — Copper alloy, duplex plated as follows:
A—.000030 [0.00076] gold on mating end, tin-lead on ACTION PIN post surface, with entire contact .000050 [0.00127] (min.) nickel underplated
B—Gold flash on mating end, tin-lead on ACTION PIN post surface, with entire contact .000050 [0.00127] (min.) nickel underplated

Shell Size	No. of Pos.	Plating Code	Plug Part No.		Receptacle Part No.		
			With Threaded Inserts	With Fixed Female Screwlocks	With Threaded Inserts	With Standard Mounting Holes	With Fixed Female Screwlocks
1	9	A	786830-1	787176-1	747090-2	747089-2	747091-2
2	15	A	—	787177-1	747141-2	747140-2	747142-2
3	25	A	748146-4	748146-6	745925-2	745922-2	745928-2
		B	—	—	—	—	745928-1
4	37	A	786534-1	—	747714-2	—	747715-2
5	50	A	—	—	747144-2	747143-2	747145-2
		B	749892-1	—	—	—	—

HD-20 Plug with Threaded Inserts

HD-20 Receptacle with Fixed Female Screwlocks

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HD-20 Full Metal-Shell Straight Posted Connectors

Material and Finish

Shell — Steel, tin plated

Insert — Thermoplastic, 94V-0, black

Contacts — Pins-Brass, Sockets-Phosphor bronze, all plated:

A— .000030 [0.00076] min. gold on mating end, tin-lead on termination end, all over .000050 [0.00127] min. nickel underplating

B— Same as A with gold flash on mating end

Shell Size	No. of Pos	Post Length	Plating Code	Part Numbers: Plugs With Grounding Indents	Part Numbers: Receptacles With Mounting Holes	Part Numbers: Receptacles With Clinch Nuts
1	9	.125	A	745410-1	745183-1	747190-2
		3.18	B	—	745183-2	747190-1
		.188 4.78	A	745410-7	745183-7	—
2	15	.125	A	745411-1	745185-1	745820-1
		3.18	B	—	—	745820-2
		.188 4.78	A	—	745185-7	—
3	25	.125	A	745412-1	745187-1	745886-1
		3.18	B	—	—	745886-2
		.188	A	745412-7	745187-7	—
		4.78	B	—	745187-8	—
4	37	.125 3.18	A	745313-1	745189-1	747315-1
		.188 4.78	A	—	745189-7	—
5	50	.125 3.18	A	745414-1	745191-1	747302-1
		.188 4.78	A	745414-7	745191-7	—

Plug
(Shown with grounding indents for illustration purposes only)

Receptacle

Clinch Nut

HD-20 Full Metal-Shell Right-Angle Posted Connectors 454 Mount

Material and Finish

Shell — Steel, tin plated

Insert — 94V-0 rated thermoplastic, black

Contacts (Posted) — Zinc

Pin — Brass

Socket — Phosphor Bronze

Contact Plating —

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

Receptacle Shell Size	No. Pos.	Plating Code	With Boardlocks: Part Number
1	9	A	745438-4

Note:
All receptacles are preloaded with size 20 DF posted socket contacts..125 [3.18] post length is recommended for pc board thickness of .093 [2.36] max.; .220 [5.59] post length is recommended for pc board thickness of .125 [3.18] max.

Receptacle

HD-20 Full Metal-Shell Right-Angle Posted Connectors 545 Mount

Material and Finish

Shell — Steel, tin plated

Insert — 94V-0 rated thermoplastic, black

Female Screwlock — Steel, zinc plated

Pin — Brass

Socket Contacts (Posted) — Phosphor Bronze, duplex plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B—Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Plugs

Shell Size	No. Pos.	Plating Code	Plug Part Numbers: With Standard Mounting Screws	Plug Part Numbers: With Female Screwlocks
1	9	A	745351-4	—
2	15	A	745352-4	—
3	25	A	745353-4	—
4	37	A	745354-4	—
5	50	A	745355-4	747497-4
		B	—	747497-3

Receptacles

Shell Size	No. Pos.	Plating Code	Receptacle Part Numbers: With Standard Mounting Screws	Receptacle Part Numbers: With Female Screwlocks
1	9	A	745112-2	747020-2
2	15	A	745113-2	747021-2
3	25	A	745114-2	745536-2
4	37	A	745115-2	—
5	50	A	745116-2	747193-2
		B	745116-1	747193-1

Notes:
1. All receptacles are preloaded with size 20 DF posted socket contacts.

Plug with Standard Mounting Screws

Plug with Female Screwlocks

Receptacle with Standard Mounting Screws

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HD-20 Solder Cup Connectors

Material and Finish

Shell — Steel, tin or zinc plated

Insert — 94V-0 rated thermoplastic, black

Contacts — Phosphor bronze, duplex plated with gold flash on mating end, tin-lead on solder cup, with entire contact nickel underplated

Shell Size	No. of Contact Positions	Plug Part Numbers		Receptacle Part Numbers	
		Tin Plated Shell	Zinc Plated Shell	Tin Plated Shell	Zinc Plated Shell
1	9	747904-2	747904-4	747905-2	747905-4
2	15	747908-2	747908-4	747909-2	—
3	25	747912-2	747912-4	747913-2	747913-4
4	37	747916-2	747916-4	747917-2	—

Plug

Receptacle

HD-20 Solder Cup Shielding Hardware Enclosure Kits

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — 94V-0 rated thermoplastic, black

Enclosure — PVC, Plack

Shields — Steel, tin plated

Contacts — Phosphor bronze, duplex plated with gold flash on mating end, tin-lead on solder cup, with entire contact nickel underplated

Shell Size	No. of Contact Positions	Kit Numbers		
		Plug with Enclosure	Receptacle with Enclosure	Receptacle without Enclosure
1	9	748046-1	748047-1	
2	15	748048-1	748049-1	748040-1
3	25	748050-1	748051-1	
4	37	748052-1	—	

Note:
Components of the kits are shipped unassembled and bulk-packaged in quantities of 100 pieces.

Plug with Enclosure

Receptacle without Enclosure

Receptacle with Enclosure

HD-20 All-Plastic Right-Angle Posted Connectors 318 Mount

Material and Finish

Housings — 94V-0 thermoplastic, black

Threaded Inserts — Zinc, chromate coated

Female Screwlocks — Zinc, chromate coated

Socket Contacts (Posted) — Phosphor bronze, duplex plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B—Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Shell Size	No. Pos.	Plating Code	Receptacles with Boardlocks		Receptacles without Boardlocks		
			With Threaded Inserts	With Fixed Female Screwlocks	With Threaded Inserts	With Fixed Female Screwlocks	With Std. Mtg. Holes
1	9	A	—	748979-1	745394-2	745395-2	—
		B	—	—	—	—	745131-1
2	15	A	—	—	—	745396-2	745271-2
3	25	A	748901-1	748981-1	745392-2	745397-2	745132-2

Notes:
1. All receptacles are preloaded with size 20 DF posted socket contacts.
2. Recommended pc board thickness is .093 [2.36] max.
3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

HD-20 Receptacle with Threaded Inserts

HD-20 Receptacle with Fixed Female Screwlocks

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HD-20 All-Plastic Right-Angle Posted Connectors 590 Mount

Material and Finish

Housings — 94V-0 thermoplastic, black

Threaded Inserts — Zinc, chromate coated

Female Screwlocks — Zinc, chromate coated

Socket Contacts (Posted) — Phosphor bronze, duplex plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B—Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

Shell Size	No. Pos.	Plating Code	Receptacles with Boardlocks: With Fixed Female Screwlocks	Receptacles Without Boardlocks: With Threaded Inserts	Receptacles Without Boardlocks: With Fixed Female Screwlocks	Receptacles Without Boardlocks: With Std. Mtg. Holes
1	9	A	—	747459-4	747459-6	747459-2
		B	—	747459-3	—	747459-1
2	15	A	—	—	—	747460-2
		B	—	747460-3	747460-5	—
3	25	A	747989-1	747461-4	747461-6	747461-2
		B	—	747461-3	747461-5	747461-1
4	37	A	—	747462-4	—	747462-2

Notes:
1. All receptacles are preloaded with size 20 DF posted socket contacts.
2. Recommended pc board thickness is .093 [2.36] max.
3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

HD-20 Receptacle with Threaded Inserts

HD-20 Receptacle with Fixed Female Screwlocks

HD-20 All-Plastic Right-Angle Posted Connectors 590 Mount

Material and Finish

Housing — 94V-0 rated thermoplastic, black

Threaded Inserts — Zinc, chromate coated

Female Screwlock — Zinc, chromate coated

Pin Contacts (Posted) — Brass, duplex plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

Shell Size	No. Pos.	Plating Code	Plugs with Boardlocks: With Fixed Female Screwlocks	Plugs Without Boardlocks: With Threaded Inserts	Plugs Without Boardlocks: With Fixed Female Screwlocks	Plugs Without Boardlocks: With Std. Mtg. Holes
1	9	A	—	747467-4	—	—
		B	—	—	—	747467-1
2	15	A	—	748872-1	748952-1	747468-2
		B	—	—	747468-5	—
3	25	A	—	748873-1	—	748826-1
		B	748913-2	—	—	748826-2
4	37	A	—	—	—	747470-2

Notes:
1. All receptacles are preloaded with size 20 DF posted socket contacts.
2. Recommended pc board thickness is .093 [2.36] max.
3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

HD-20 Plug with Standard Mounting Holes

HDJ-20 All-Plastic Right-Angle Posted Plug Connectors, 590 Mount (For PC Board Mount and Cord Guard Latch)

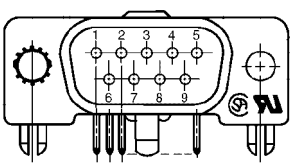
Material and Finish

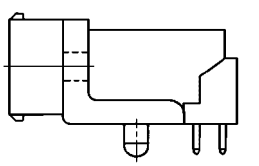
Housing and Post Spacer — 94V-0 rated thermoplastic, black

Pin Contacts (Posted) — Brass, duplex plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B—Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated





Plating	Part Number with .125 [3.18] Dia. Mounting Holes
A	745001-2
B	745001-3

AMPLIMITE PCB Connectors

HD-20 All-Plastic Straight Posted Connectors

Material and Finish

Housings — 94V-0 thermoplastic, black

Threaded Inserts — Brass, unplated

Female Screwlocks — Brass, nickel plated

Pin/Socket Contacts Posted) — Brass, plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact .000050 [0.00127] (min.) nickel underplated

B—Gold flash on mating end, tin-lead on termination end, with entire contact .000050 [0.00127] (min.) nickel underplated

Input/Output Connectors (Continued)

Shell Size	No. Pos.	Post Length	Plating Code	Plug Part Numbers: With Standard Mounting Holes	With Threaded Inserts	With Fixed Female Screwlocks
1	9	**.125**	A	208006-2	745051-2	745071-2
		3.18	B	—	745051-1	745071-1
		.170 4.32	A	—	745051-4	745071-4
2	15	**.125**	A	208007-2	745052-2	745072-2
		3.18	B	208007-1	745052-1	—
		.170 4.32	A	—	—	745072-4
3	25	**.125**	A	208008-2	745053-2	745073-2
		3.18	B	208008-1	—	745073-1
		.170	A	208008-4	—	745073-4
		4.32	B	—	—	745073-3
4	37	**.125**	A	—	—	745074-2
		3.18	B	—	—	745074-1
		.170 4.32	A	—	—	745074-4
5	50	**.125**	A	208010-2	—	—
		3.18	B	208010-1	—	—

HD-20 Plug with Standard Mounting Holes

HD-20 Plug with Threaded Inserts

HD-20 Plug with Fixed Female Screwlocks

Notes:
1. All plugs are preloaded with size 20 DF posted pin contacts.
2. Recommended pc board thickness is .062-.093 [1.58-2.36] max. for .125 [3.18] post length.
3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

Shell Size	No. Pos.	Post Length	Plating Code	Receptacle Part Numbers: With Standard Mounting Holes	With Threaded Inserts	With Fixed Female Screwlocks
1	9	**.125**	A	207826-4	207841-4	745076-4
		3.18	B	207826-3	207841-3	745076-3
		.170	A	—	—	745076-6
		4.32	B	—	—	745076-5
2	15	**.125**	A	207827-4	745057-4	745077-4
		3.18	B	207827-3	745058-3	745077-3
		.170	A	207827-6	—	745077-6
		4.32	B	—	—	745077-5
3	25	**.125**	A	207828-4	745058-4	745078-4
		3.18	B	207828-3	745058-3	745078-3
		.170	A	207828-6	745058-6	745078-6
		4.32	B	207828-5	—	745078-5
4	37	**.125**	A	207829-4	745059-4	745079-4
		3.18	B	207829-3	—	—
		.170 4.32	A	—	—	745079-6
5	50	**.125** 3.18	A	207830-4	—	745080-4

HD-20 Receptacle with Standard Mounting Holes

HD-20 Receptacle with Threaded Inserts

HD-20 Receptacle with Fixed Female Screwlocks

Notes:
1. All receptacles are preloaded with size 20 DF posted socket contacts.
2. Recommended pc board thickness is .062-.093 [1.58-2.36] max. for .125 [3.18] post length; .093-.125 [2.36-3.18] for .170 post length
3. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

AMPLIMITE PCB Connectors

HD-20 All-Plastic Straight Posted Connectors with ACTION PIN Contacts

Material and Finish

Housing — 94V-0 rated thermoplastic, black

Threaded Inserts — Brass, unplated

Female Screwlocks — Brass, nickel plated

ACTION PIN Contacts — Copper alloy, duplex plated as follows:

A—.000030 [0.00076] gold on mating end, tin-lead on ACTION PIN post surface, with entire contact .000050 [0.00127] (min.) nickel underplated

Input/Output Connectors (Continued)

Shell Size	No. of Pos.	Profile	Plating Code	.093 [2.36] (min.) Thk. PC Boards			.062 [1.57] min.) Thk. PC Boards	
				With Std. Mounting Holes	With Threaded Inserts	With Fixed Female Screwlocks	With Std. Mounting Holes	With Threaded Inserts
1	9	Low	A	—	—	745454-2	—	—
		High	A	—	745463-2	745455-2	—	—
2	15	Low	A	745336-2	—	—	—	—
		High	A	—	—	—	—	545612-2
3	25	Low	A	—	—	745458-2	—	—
4	37	Low	A	745337-2	—	745459-2	745589-2	—

Notes:
1. All receptacles are preloaded with straight posted ACTION PIN socket contacts.
2. Male screw retainers are used as mating hardware for connectors with 4-40 female screwlocks.

HD-20 Receptacle with Fixed Female Screwlocks (Shown)

AMPLIMITE III, HD-20 Front Metal-Shell Right-Angle Connectors, .318 [8.08] PCB Footprint

Material and Finish

Housing — Thermoplastic, 94V-0 rated, compatible with standard wave solder, vapor phase, and infra red reflow (SMT), black

Shell — Steel, tin plated

Contacts — Plugs- Brass, Receptacles - Phosphor Bronze

Plating Code —

A— Duplex plated .000030 [0.00076] min. gold on the mating end, tin-lead on solder end, all over nickel underplating

B— Duplex plated gold flash on the mating end, tin-lead on solder end, all over nickel underplating

Plug Shell Size	No. Pos.	Plating Code	With Boardlocks	
			With Threaded Inserts	With Fixed Female Screwlocks
1	9	A	748879-1	748959-1
		B	748879-2	748959-2
3	25	A	748881-1	748961-1

Receptacle Shell Size	No. Pos.	Plating Code	With Boardlocks		Without Boardlocks
			With Threaded Inserts	With Fixed Female Screwlocks	With Fixed Female Screwlocks
1	9	A	748875-1	748955-1	748915-1
		B	748875-2	748955-2	—
2	15[1]	A	748876-1	748956-1	—
		B	748876-2	—	—
3	25	A	748877-1	748957-1	—
		B	748877-2	748957-2	—
4	37	A	748878-1	—	—

[1]15-Pos. Receptacle Part No. 748836-1 without boardlocks, with threaded inserts also available.

Plug with 4-40 Threaded Inserts

Plug with Female Screwlocks

Receptacle with 4-40 Threaded Inserts

Receptacle with Female Screwlocks

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HDE-20 All Plastic IDC Connectors

Material and Finish

Housing — 94V-0 rated thermoplastic, black

Contact — Phosphor bronze

Contact Finish — Duplex plated:

A—.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B —Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

Shell Size	No. of Pos.	Plating Code	Plug Part Nos.		Receptacle Part Nos.	
			Contact Identification No. 1[1]	Contact Identification No. 2[2]	Contact Identification No. 1[1]	Contact Identification No. 2[2]
1	9	A	—	745203-2	—	745201-2
		B	—	745203-5	—	745201-5
2	15	A	—	745207-2	—	745205-2
		B	—	745207-5	—	—
3	25	A	745211-1	745211-2	745209-1	745209-2
		B	—	—	—	—
4	37	A	—	745215-2	—	745213-2
		B	—	—	—	—

[1]For 30-26 AWG [0.05-0.15 mm^2] wire.
[2]For 26-22 AWG [0.15-0.4 mm^2] wire.

Notes:
1. All connectors are preloaded with insulation displacement crimp contacts. Pins in plug connectors and sockets in receptacle connec tors.
2. HDE connectors are designed for terminating solid or stranded wire.
3. Individual connector strands should be larger than .005-inc. [0.127] diameter.
4. Extraction tool part no. 91232-1 is used to remove pin or socket contacts.

Plug

Receptacle

HDE-20 Metal-Shell IDC Connectors

Material and Finish

Shell — Steel, tin plated

Insert — 94V-0 rated thermoplastic, black

Contacts — Phosphor bronze

Contact Finish — Duplex plated:

A —.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B —Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

Plugs

Shell Size	No. Pos.	Plating Code	Contact Identification No. 1 for 30-26 AWG [0.05-0.15mm^2] Wire	Contact Identification No. 2 for 26-22 AWG [0.15-0.4mm^2]	Contact Identification No. 3 for 22-20 AWG [0.4-0.6mm^2] Wire
			Plug	Plug	Plug
1	9	A	745492-1	745492-2	745492-3
		B	—	745492-5	745492-6
2	15	A	745494-1	745494-2	—
		B	—	745494-5	745494-6
3	25	A	745496-1	745496-2	745496-3
		B	745496-4	745496-5	745496-6
4	37	A	745498-1	745498-2	—
		B	—	745498-5	—

Notes:
1. All connectors are preloaded with insulation displacement crimp contacts. Pins in plug connectors and sockets in receptacle connectors.
2. Connectors can be made available with clinch nuts, contact AMP.
3. HDE connectors are designed for terminating solid or stranded wire.
4. Individual connector strands should be larger than .005-inc. [0.127] diameter.
5. Extraction tool part no. 91232-1 is used to remove pin or socket contacts.

Plug

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Input/Output Connectors (Continued)

HDE-20 Metal-Shell IDC Connectors

Material and Finish

Shell — Steel, tin plated

Insert — 94V-0 rated thermoplastic, black

Contacts — Phosphor bronze

Contact Finish — Duplex plated:

A —.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B —Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

Receptacles

Shell Size	No. Pos	Plating Code	Contact Identification No. 1 for 30-26 AWG [0.05-0.15mm²] Wire Receptacle	Contact Identification No. 2 for 26-22 AWG [0.15-0.4mm²] Receptacle	Contact Identification No. 3 for 22-20 AWG [0.4-0.6mm²] Wire Receptacle
1	9	A	745491-1	745491-2	745491-3
		B	—	745491-5	—
2	15	A	745493-1	745493-2	745493-3
		B	—	745493-5	745493-6
3	25	A	745495-1	745495-2	745495-3
		B	—	745495-5	—
4	37	A	745497-1	745497-2	—
		B	—	745497-5	—

Notes:

1. All connectors are preloaded with insulation displacement crimp contacts. Pins in plug connectors and sockets in receptacle connectors.
2. Connectors can be made available with clinch nuts, contact AMP.
3. HDE connectors are designed for terminating solid or stranded wire.
4. Individual connector strands should be larger than .005-inc. [0.127] diameter.
5. Extraction tool part no. 91232-1 is used to remove pin or socket contacts.

Receptacle

HDE-20 Interchangeable Contacts, Precision Formed, Crimp Snap-in

Material and Finish

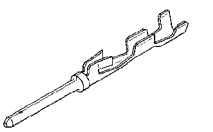
Contacts — Phosphor bronze

Contact Finish — Duplex plated:

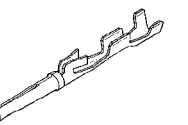
.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

Wire Size Range AWG mm²	Insulation Dia. Single Wire	Insulation Dia. Two Wire	Pin Strip	Pin Loose	Socket Loose
26-22 0.15-0.4	**.054** 1.37	**.093** 0.99	745266-2	—	745269-3
22-18 0.4-0.8	**.075** 1.91	**.054** 1.37	—	745267-3	—

Pin



Socket



HDE-20 Basic Shielding Hardware Kits

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — 94V-0 rated thermoplastic, black

Shield — Steel, tin plated

Contacts — Phosphor bronze

Contact Finish — Duplex plated:

A —.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B —Gold flash on mating end, tin-lead on termination end, with entire contact nickel underplated

Plugs

Shell Size	No. Pos.	Plating Code	Contact Identification No. 2 for 26-22 AWG [0.15-0.4 mm²] Plug	Contact Identification No. 3 for 22-20 AWG [0.4-0.6 mm²] Plug
1	9	A	747515-2	747515-3
2	15	A	747531-2	—
3	25	A	747547-2	—

Plug

Receptacles

Shell Size	No. Pos.	Plating Code	Contact Identification No. 1 for 30-26 AWG [0.05-015 mm²] Receptacle	Contact Identification No. 2 for 26-22 AWG [0.15-0.4 mm²] Receptacle
1	9	A	747516-1	—
		B	—	747516-5
3	25	A	—	747548-2
		B	—	747548-5

Receptacle

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

HDE-20 Basic Shielding Hardware Kits with Enclosure

Material and Finish

Connector Shell — Steel, tin plated

Connector Insert — 94V-0 rated thermoplastic, black

Shield — Steel, tin plated

Enclosure — PVC, black

Jackscrews — Zinc alloy

Contacts — Phosphor bronze

Contact Finish — Duplex plated:

A —.000030 [0.00076] gold on mating end, tin-lead on termination end, with entire contact nickel underplated

B—Gold flash on mating end, tin-lead on solder end, all nickel underplate

Input/Out Connectors (Continued)

Shell Size	No. of Pos.	Plating Code	Kit Part Numbers: Plugs Contact I.D. No. 1 for 30-26 AWG [0.05-0.15 mm²]	Plugs Contact I.D. No. 2 for 26-22 AWG [0.15-0.4 mm²]	Receptacles Contact I.D. No. 1 for 30-26 AWG [0.05-0.15 mm²]	Receptacles Contact I.D. No. 2 for 26-22 AWG [0.15-0.4 mm²]
1	9	A	747944-1	747944-2	747943-1	747943-2
		B	—	747944-5	—	—
2	15	A	747946-1	747946-2	747945-1	747945-2
3	25	A	747948-1	—	—	747947-2
		B	—	747948-5	—	747947-5
4	37	A	747950-1	—	—	—
		B	—	747950-5	—	—

Plug

Receptacle

AMPLIMITE 2000 Right-Angle Subminiature D Connectors, .318 [8.08] PCB Footprint

Material and Finish

Housings — Thermoplastic, 94V-0 rated, black

Shell — Steel, plated .000150 [0.00381] min. tin over .000100 [00.00254] min. copper

Contacts — Pin: Brass, Socket: Phosphor Bronze, Both plated:

A— Gold flash on mating end, tin-lead on solder end, all nickel underplate

B—.000030 [0.00076] min. gold on mating end, tin-lead on solder end, all nickel underplate

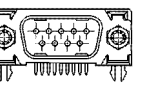
Boardlocks and 4-40 Threads — Steel, integral part of front metal-shell

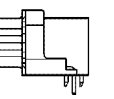
Female Screwlocks — Zinc, clear chromate

Post Length	Plt. Code Inserts	Part No.[1] 4-40 Threads	Part No.[1] Female Screwlocks
.125	A	787203-1	787650-1
3.18	B	787203-2	—
.085	A	787203-3	—
2.16	B	—	787650-4

[1]Shell size 1

9-Pos.Plug

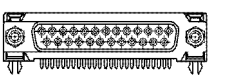


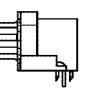


Post Length	Plt. Code Inserts	Part No.[1] 4-40 Threads	Part No.[1] Female Screwlocks
.125	A	787202-1	—
3.18	B	787202-2	787652-2
.085 2.16	A	—	787652-3

[1]Shell size 3

25-Pos. Receptacle



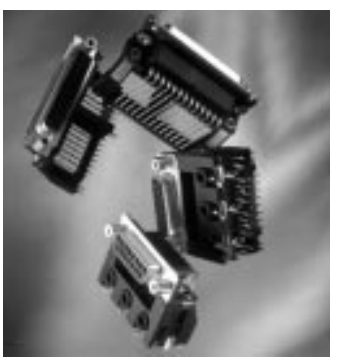


Stacked, *Hi-Rise* Receptacles:

Part No. 787812-1: Hi-Rise, 25-Position Assembly

Material and Finish

Housing — Thermoplastic, 94V-0



BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

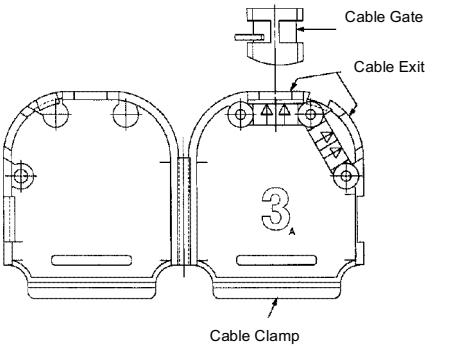
Input/Output Connectors (Continued)

Unshielded Cable Clamps

One-Piece, All-Plastic Cable Clamp for Jacketed Cable, 180˚/120˚ Exit (HDP and HDE) (Quik-Snap)

Shell Size	Cable Dia. Range	Kit No. with Screws/Retainer Clips	
		Individual	Bulk Pack
1	**.075-.250** [1.91-6.36]	749914-2	714914-1
2	**.170-.380** [4.32-9.65]	745915-2	—
3	**.180-.460** [4.57-11.68]	749626-2	—
4	**.250-.550** [6.35-13.97]	749916-2	—

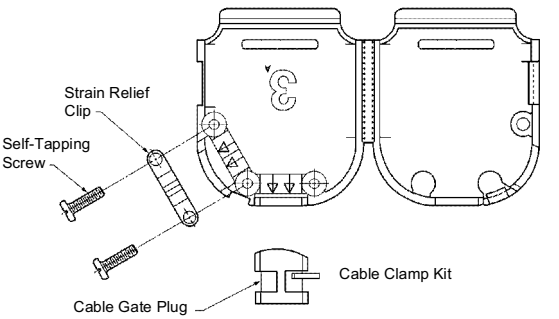
Each kit contains:
- 1-Hinged, plastic clamp
- 2-Self-tapping screws
- 1-Strain relief clip
- 1-Cable exit gate plug (used to close unused exit)



Material and Finish

Cover — Polypropylene, black
Strain Relief Clip — Stainless steel
Retainer Clip — Stainless steel
Screws — Carbon steel, zinc plated

One-Piece, All-Plastic Cable Clamp for Jacketed Cable, 180˚/120˚ Exit HDE-20 Connector



Material and Finish

Cover — Polypropylene, black
Retention Screws — Steel, zinc plated
Retainer Clip — Stainless steel
Self-Tapping Screws — Steel, zinc plated

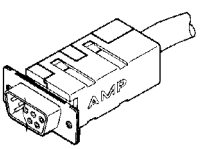
Each kit contains:
- 1-Hinged, plastic clamp
- 2-Retention screws
- 2-Retention clips
- 1-Cable Gate plug
- 2-Self-tapping screws
- 1-Strain relief clip
- 1-Connector and Contacts

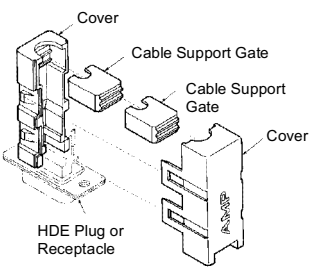
Shell Size	Cable Dia. Range	HDP-20 Connectors		HDE-20 Connectors		Packaging
		Plug Kit Part No.	Receptacle Part No.	Plug Kit Part No.	Receptacle Part No.	
1	**.075-.259** [1.91-6.35]	749908-1	—	—	—	100/Pack
		749808-4	—	—	—	25/Pack
2	**.170-.380** [4.32-9.65]	749808-2	—	749809-2	—	100/Pack
		749808-5	—	—	—	25/Pack
3	**.180-.460** [4.58-11.68]	749808-3	749812-3	749809-3	749813-3	100/Pack
		749808-6	—	—	—	25/Pack

Straight Exit Low Profile for Jacketed Cable

Shell Size	Cable Dia. Max.	Cable Clamp Kit No.	
		Individual	Bulk
1	**.330** [8.38]	745547-1	745547-2
2	**.425** [10.8]	745553-1	—
3	**.550** [13.97]	745560-1	745560-2

Notes:
1. All parts are packaged unassembled.
2. Each kit is comprised of two cover halves and an assortment of cable support gates.
3. Cable support gate must be used as shown for small diameter cable.





Material and Finish

Black, thermoplastic

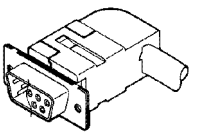
AMPLIMITE PCB Connectors

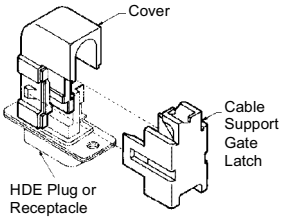
Input/Output Connectors (Continued)

90° Exit Low Profile for Jacketed Cable

Shell Size	Cable Dia.(Max.)	Cable Clamp Kit No. Individual
1	**.330** [0.84]	745550-1

Notes:
1. All parts are packaged unassembled.
2. Each kit is comprised of a cover half and an assortment of cable support gate latches.





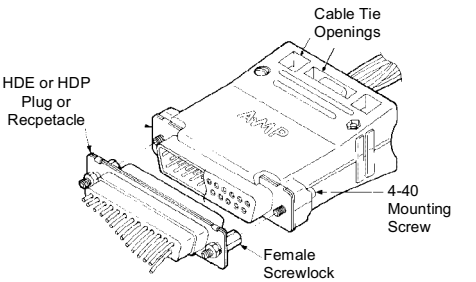
Material and Finish

Black, thermoplastic

Straight 90° Exit

Shell Size	Cable Dia. (Max.)	Cable Clamp Kit Numbers Individual
2	**.350** [0.89]	206471-1
3	**.335** [0.85]	206472-1
	.460 [11.68]	745134-1
4	**.675** [1.71]	745081-1
5	**.775** [1.97]	745082-1

Notes:
1. All parts are packaged unassembled.
2. Straight or 90° cable exit is achieved by inserting AMP-TY Cable Ties through cable tie openings and clamping the cable to one housing half only.



Material and Finish

Cable Clamp Housing — Thermoplastic, gray

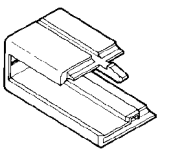
4-40 Mounting Screws — Steel, zinc plated

4-40 Housing Screws & Hex Nut — Steel, zinc plated

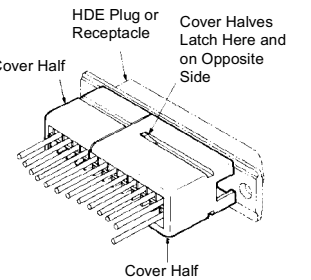
Slide-On Back Covers

Shell Size	Back Cover Kit Number Individual
1	745530-1
2	745530-2
3	745530-3
4	745530-4

Notes:
1. All parts are packaged unassembled.
2. Each slide-on back cover kit includes two identical cover halves which snap together over the connector.



Back Cover Half



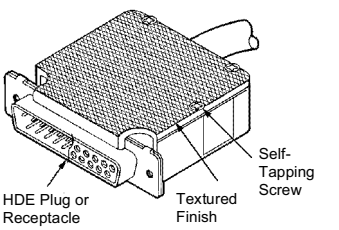
Material and Finish

Black thermoplastic

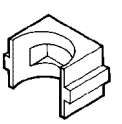
Box and Lid Straight/90° Exit

Shell Size	Cable Dia. Max. (Ref.) Straight Cable	Cable Dia. Max. (Ref.) 90° Cable	Cable Clamp Kit Number Individual	Cable Clamp Kit Number Bulk Packed
1	**.160** 4.06	**.160** 4.06	207467-1	207467-2
2	**.320** 8.13	**.320** 8.13	207470-1	—
3	**.390** 9.91	**.390** 9.91	207345-1	—
4	**.640** 16.26	**.405** 10.29	207473-1	207473-2

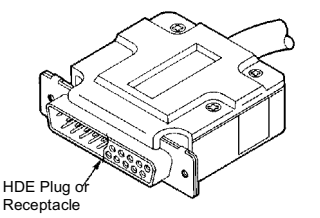
Notes:
1. All parts are packaged unassembled.
2. Cable diameter is adjustable by changing cable support gates. Use flat side of cable support gates for discrete wire, and the semicircle side for jacketed cable.
3. Cable clamp assemblies are available in kits with male screw retainers.



Shell Size 1 & 2



Typical Cable Support Gate (supplied with Cable Clamp Kit)



Shell Size 3, 4 & 5

Material and Finish

Cable Clamp Housing — Thermoplastic, black with textured finish

Gates — Thermoplastic, black

Flat Head Screws — Steel, black, zinc plated

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Box and Lid Straight/90˚ Exit Cable Clamp Kits with Male Screw Retainers

Material and Finish

Cable Clamp Housing — Thermoplastic, black with textured finish

Gates — Thermoplastic, black

Flat Head Screws — Steel, black, zinc plated

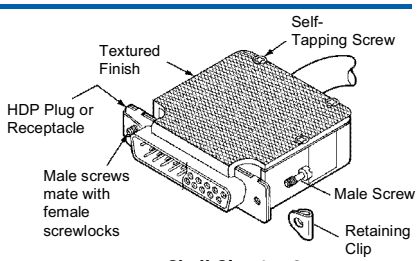
Male Screw — Steel, zinc plated yellow chromate

Retaining Clip — Stainless steel

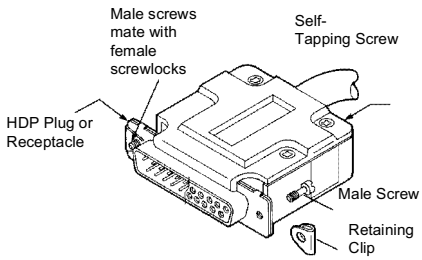
Input/Output Connectors (Continued)

Shell Size	Cable Clamp Kit Number	
	Individual	Bulk Packaged
1	207908-1	207908-2
2	207908-4	—
3	207908-7	207908-8
4	1-207908-0	—

Notes:
1. All parts are packaged unassembled.
2. Each slide-on back cover kit includes two identical cover halves which snap together over the connector.



Shell Size 1 & 2



Shell Size 3, 4 & 5

Clam Shell Straight/45˚ Exit

Material and Finish

Cable Clamp Housing — Thermoplastic, black with textured finish

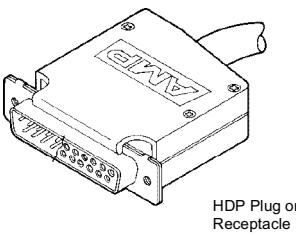
Gates — Thermoplastic, black

Pan Head Screws, 6-32 Set Screw and 6-32 Square Nut — Steel, zinc plated (sizes 1 and 2 include self-tapping screws only)

Shell Shell	Cable Dia. (Max.)	Short Cable Clamp Kit Number	Standard Cable Clamp Kit Number	
		Individual	Individual	Bulk Packed
1	**.256** 6.30	—	205729-1	205729-3
2	**.320** 8.13	206393-1	—	—
2[1]	**.320** 8.13	—	205730-1	205730-3
3[1]	**.420** 10.67	206390-1	—	—
3	**.420** 10.67	—	205718-1	205718-4
4	**.490** 12.45	—	205731-1	—
5	**.600** 15.24	—	205732-1	—

[1]Small housing

Notes:
1. All parts are packaged unassembled.
2. Cable clamp assemblies are available in kits with male screw retainers.



Clam Shell Straight/45˚ Exit Cable Clamp Kits with Male Screw Retainers

Material and Finish

Cable Clamp Housing — Thermoplastic, black with textured finish

Gates — Thermoplastic, black

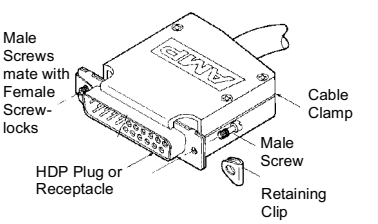
Pan Head Screws, 6-32 Set Screw and 6-32 Square Nut — Steel, zinc plated (sizes 1 and 2 include self-tapping screws only)

Male Screw — Steel, zinc plated yellow chromate

Retaining Clip — Stainles steel

Shell Size	Short Cable Clamp Kit Number		Standard Cable Clamp Kit Number
	Individual	Bulk Packed	Individual
1	—	—	206478-1
2	—	—	206478-2
3	1-206478-2	—	206478-3

Notes:
1. All parts are packaged unassembled.
2. Each kit is comprised of a cable clamp and male screw retainer hardware (2 each). Male screw retainers are also available in kit form.
3. For ordering cable clamps separately, see above.



BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Straight/90° Exit

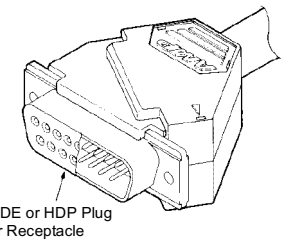
Material and Finish

Black thermoplastic

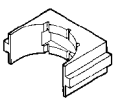
Input/Output Connectors (Continued)

Shell Size	Cable Dia.	Cable Clamp Kit Number — Individual
3	**.550**	745306-1
4	**.750**	745311-1

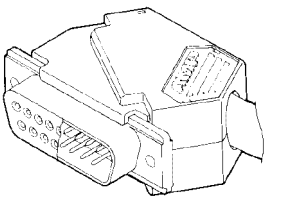
Notes:
1. All parts are packaged unassembled.
2. Each cable clamp assembly includes a yoke, male panel, female panel and four cable support gates. The cable diameter is adjustable by changing the cable support gates.



Straight Cable Exit Application



Typical Cable Support Gate



90° Cable Exit Application

Straight Exit Dataphone

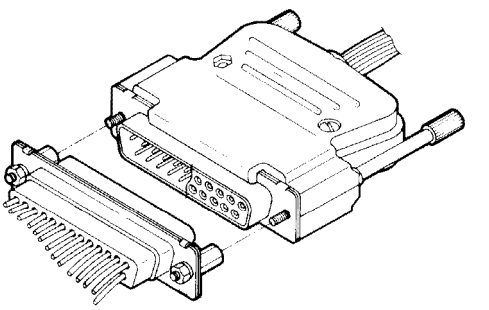
Material and Finish

Cable Clamp Housing — Polyester, black

Jackscrews — Steel, black zinc plated

4-40 Fillister Head Screws & Hex Nuts — Steel, clear zinc plated

Shell Size	Max. Cable Dia. (without Gate)	Cable Clamp Kit Part No.
2	**.400** 10.16	745122-2
3	**.500** 12.7	745121-2



Universal Cable Clamp for Jacketed Cable

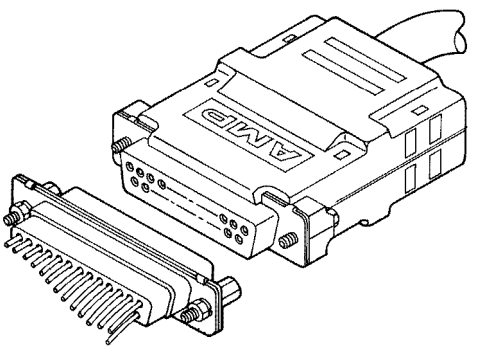
Material and Finish

Cable Clamp Housing — Thermoplastic, black

Cable Clamp Wedge Set — Thermoplastic, black

4-40 Mounting Screws — Steel, zinc plated

For Shell Size 3
Cable Dia. Range .190-.530 [4.83-13.46]
Individual Kit Part No. 747824-1



AMPLIMITE PCB Connectors

Shielded Cable Clamps

Straight Exit RFI/EMI Shields for Jacketed Cable (Two-Piece)

Material and Finish

Die Cast Shield — Zinc alloy, plated bright nickel over bright copper

Metal-Plated Plastic Shield — Thermoplastic, plated nickel over copper

Plastic Shield — Thermoplastic, black

4-40 Fillister Head Screws and Hex Nuts — Steel, zinc plated

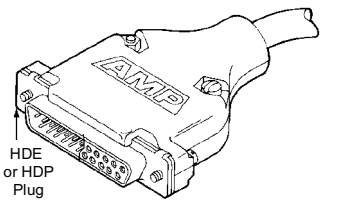
4-40 Mounting Screws — Steel, zinc plated

Jackscrews — Steel, zinc plated clear chromate

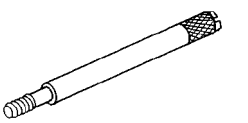
Input/Output Connectors (Continued)

Shell Size	Cable O.D. (Max.)	Die Cast Shield Kit Numbers	Metal-Plated Plastic Shield Kit Numbers	Grommet Set Part Number
1	**.200** 5.08	745171-2	—	—
	.250 6.35	745171-1	—	—
	.370 9.40	745171-5	—	747746-1
2	**.225** 5.72	745172-3	745099-7	—
	.300 7.62	745172-2	747099-5	—
	.375 9.53	745172-1	747099-3	747746-1
	.430 10.92	1-745172-3	747099-1	—
3	**.280** 7.11	745173-5	745833-9	—
	.350 8.89	745173-4	745833-7	—
	.430 10.92	745173-3	—	—
	.480 12.19	745173-2	745833-3	—
	.530 13.46	745173-1	745833-1	747973-1
4	**.350** 8.89	745174-5	747100-9	—
	.425 10.80	745174-4	747100-7	—
	.500 12.70	745174-3	747100-5	—
	.530 13.46	2-745174-7	1-747100-1	747973-1
	.575 14.61	745174-2	747100-3	—
	.650 16.51	745174-1	747100-1	—
5	**.375** 9.53	745175-6	—	—
	.450 11.43	745175-5	747098-9	—
	.525 13.34	745175-4	—	747973-1
	.600 15.24	745175-3	747098-5	—
	.675 17.15	745175-2	—	—
	.750 19.05	745175-1	747098-1	—

*See page 39 for ferrules.



HDE or HDP Plug or Receptacle



4-40 Male Jackscrew Kit Nos.: 747784-8 (bulk packed)

Shell Size	Cable O.D. Range	Kit Numbers: Die Cast Shield With Grommets	Kit Numbers: Metal-Plated Plastic Shield With Grommets
1	**.185-.320** 4.70-8.13	748676-1	748677-1
2	**.185-.320** 4.70-8.13	748676-2	748677-2
3	**.255-.470** 6.48-11.94	748676-3	748677-3
4	**.255-.470** 6.48-11.94	748676-4	748677-4
5	**.255-.470** 6.48-11.94	748676-5	748677-5

Notes:
1. All parts are packaged unassembled.
2. Jackscrews must be purchased separately.
3. Shielded cable clamps will not accept connector housings with clinch nuts.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

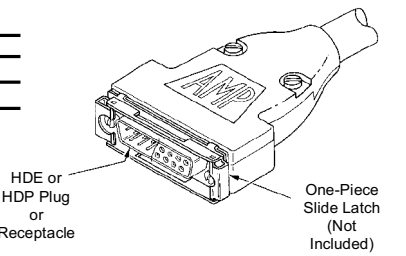
Input/Output Connectors (Continued)

Shielded Cable Clamps

Straight Exit RFI/EMI Die Cast Shield for Jacketed Cable (Two-Piece)

Shell Size	Cable Dia. (Max.)	No. of Positions	Part Number
2	**.300** [7.62]	15	747919-3
2	**.375** [9.53]	15	745919-2
2	**.430** [10.92]	15	745919-1

Notes:
1. All parts are packaged unassembled.
2. Each kit comprised of a two-piece shield with 2 pan head screws.



Material and Finish

Shield — Zinc alloy, plated nickel over copper

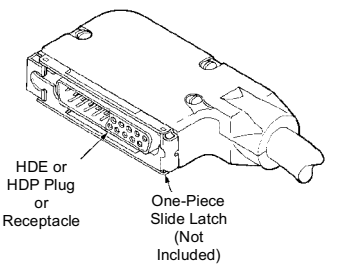
4-40 Pan Head Screws and Latch Screws (90° Exit Only) — Steel, zinc plated

One-Piece Slide Latch (90° Exit Only) — Stainless steel

90° RFI/EMI Die Cast Shields for Jacketed Cable (Two-Piece)

Shell Size	Cable Dia. (max.)	Shield with Slide Latch Kit Part Nos.	Shield without Slide Latch Kit Part Nos.
2	**.225** 6.48	745652-4	—
	.300 7.62	745652-3	—
	.375 9.53	745652-2	745918-2
	.430 10.92	745652-1	—
3	**.280** 7.11	745653-5	—
	.355 9.02	745653-4	—
	.430 10.92	745653-3	747194-3
	.480 12.19	745653-2	—
	.530 13.46	745653-1	—

Notes:
1. All parts are packaged unassembled.
2. Each kit comprised of a two-piece shield with 3 pan head screws and a slide latch with 2 4-40 slide latch screws.
3. Split-ring and crimp ferrules shown below.



Material and Finish

Shield — Zinc alloy, plated nickel over copper

4-40 Pan Head Screws and Latch Screws (90° Exit Only) — Steel, zinc plated

One-Piece Slide Latch (90° Exit Only) — Stainless steel

Crimp and Split-Ring Ferrules

Material and Finish

Outer Ferrule — Copper, plated .000100 [0.00254] min. tin

Inner Ferrule — .023 [0.58] thick brass, plated .000050 [0.00127] tin over copper

Shell Size	Cable Dia. (Max.)	When Using This Shield Kit: Die Cast Straight Exit Shield Kit Number	Use these Ferrules: Split-Ring[1] Ferrule Part Number	Crimp Ferrule No.[2]: Inner	Crimp Ferrule No.[2]: Outer
1	**.200** 5.08	745171-2	745508-2	—	—
	.240 6.10	745171-5	—	—	745508-8
	.240 6.10	745171-1	745508-3	—	745130-8
	.280 7.11	745171-5	—	3-745129-4	—
	.370 9.40	745171-5	745508-6	1-745129-7	—
2	**.225** 5.72	745172-3	745508-3	—	—
	.240 6.10	745172-1	—	1-745129-8	745130-8
	.240 6.10	1-745172-3	—	2-745129-1	745130-8
	.280 7.11	1-745172-3	—	3-745129-2	—
	.300 7.62	745172-2	745508-4	—	—
	.350 8.90	1-745172-3	—	2-745129-0	745130-9
	.365 9.27	745172-1	—	—	1-745130-0
	.375 9.53	745172-1	745508-6	—	—
	.430 10.92	1-745172-3	745508-1	1-745129-9	1-745130-1
3	**.240** 6.10	745173-3	—	2-745129-1	745130-8
	.280 7.11	745173-5	745508-4	—	—
	.280 7.11	745173-3	—	—	1-745130-6
	.350 8.89	745173-4	745508-5	—	—
	.350 8.89	745173-3	—	2-745129-0	—
	.430 10.92	745173-3	745508-1	—	1-745130-1
	.430 10.92	745173-1	—	—	1-745130-1
	.480 12.19	745173-2	745508-8	—	—
	.530 13.46	745173-1	745508-9	2-745129-2	1-745130-2

Notes:

1 For split-ring ferrules, min. o.d. is .040 [1.02] smaller than max. o.d.

2 For inner and outer ferrules, min. o.d. is .050 [1.27] smaller than max. o.d. At the max cable o.d., the min. insulation is .050 [1.52]

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPLIMITE PCB Connectors

Crimp and Split-Ring Ferrules (Continued)

Material and Finish

Outer Ferrule — Copper, plated .000100 [0.00254] min. tin

Inner Ferrule — .023 [0.58] thick brass, plated .000050 [0.00127] tin over copper

Input/Output Connectors (Continued)

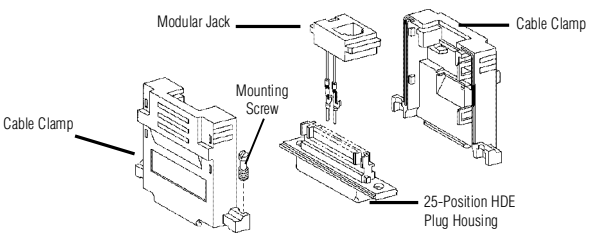
Shell Size	Cable Dia. (Max.)	When Using This Shield Kit: Die Cast Straight Exit Shield Kit Number	Use these Ferrules: Split-Ring[1] Ferrule Part Number	Crimp Ferrule No.[2]: Inner	Crimp Ferrule No.[2]: Outer
4	**.240** 6.10	745174-4	—	2-745129-1	745130-8
	.280 7.11	745174-4	—	3-745129-2	1-745130-6
	.350 8.90	745174-5	745508-5	—	—
	.350 8.90	745174-4	—	2-745129-0	745130-9
	.430 10.92	745174-4	745508-1	1-745129-9	1-745130-1
	.500 12.70	745174-3	745508-8	—	—
	.525 13.34	745174-1	—	2-745129-6	1-745130-2
	.575 14.61	745175-2	1-745508-0	—	—
	.650 16.51	745174-1	—	2-745129-5	1-745130-3
5	**.240** 6.10	745175-6	—	—	745130-8
	.350 8,90	745175-4	—	—	745130-9
	.365 9.27	745175-6	—	—	1-745130-0
	.375 9.53	745175-6	745508-6	—	—
	.430 10.92	745175-4	—	—	1-745130-1
	.450 11.43	745175-5	745508-7	—	—
	.525 13.46	745175-4	745508-9	—	—
	.530 9.53	745175-4	—	2-745129-2	1-745130-2
	.600 15.24	745175-3	1-745508-0	—	—
	.650 16.51	745175-1	—	—	1-745130-3
	.675 17.15	745175-2	1-745508-1	—	—
	.750 19.05	745175-1	1-745508-2	—	—

Notes:

1 For split-ring ferrules, min. o.d. is .040 [1.02] smaller than max. o.d.

2 For inner and outer ferrules, min. o.d. is .050 [1.27] smaller than max. o.d. At the max cable o.d., the min. insulation is .050 [1.52]

AMPLIMITE Transition Connector (RS-232 to Modular Jack)



Connector Type	Interface Type	Kit Part Number
Size 3-25 Position Plug	6 Position Modular Jack	748100-1
Size 3-25 Position Receptacle	6 Position Modular Jack	748152-1
Size 3-25 Position Plug	8 Position Modular Jack	747772-1
Size 3-25 Position Receptacle	8 Position Modular Jack	747868-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMP

AMPLIMITE AT Adapter

Shielded DB9F/DB25M
Part No. 621782-1

Shielded Data Link (SDL) Connectors

Input/Output Connectors (Continued)

Plug 50 Series Assemblies for Flat Cable and 50 and 36 Series Round Shielded Cable

Material and Finish

Housings — Polycarbonate, 94V-2 rated

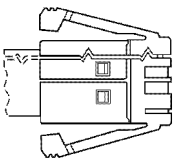
Shield — for flat cable: Copper alloy, plated bright tin-lead; for round shielded cable: Steel, plated bright tin

Contacts — Copper alloy, plated .000050 [0.00127] min. gold on mating area over nickel underplate

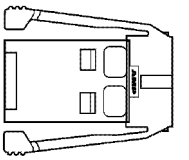
Notes:

1. Flat cable plug assemblies accept cable size range–24 AWG or 26 AWG [0.2mm² or 0.12-0.15mm²]

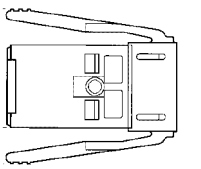
2. 50 Series Round shield cable plug assemblies accept cable size range–24 AWG or 26 AWG [0.2mm² or 0.12-0.15mm²]; 36 Series Round shield cable plug assemblies accept cable size range–26 AWG or 28 AWG [0.12-0.15mm² or 0.08-0.09mm²]



Flat Cable Plug



Round Cable Plug



M.B.I. Plug

No. of Pos.	Key	Part Numbers						
		50 Series Flat Cable	50 Series Round Cable	36 Series Round Cable	Top Shield	Bottom Shield	Ferrule	Boot
4	D	—	4-520424-1	—	520460-1	520461-1	520433-1	520851-1
	E	5-520423-1	5-520424-1	5-520532-1				
6	A	—	1-520424-2	—	—	—	—	520852-1
6[1]	—	—	943010-2	—	520462-1	520463-1	520435-1	943014-2
8	A	1-520423-3	1-520424-3	1-520532-3	520464-1	520465-1	520436-1 520437-1[1]	520853-1
	C	—	3-520424-3					
	E	5-520423-3	5-520424-3					
16	A	—	1-520424-6	1-520532-6	520466-1	520467-1	520440-1 520441-1[2]	520454-1
	E	5-520423-6	—	—				

[1]Connector for Medical Information Bus (M.B.I.)
[2]Larger ferrule O.D.

Note:
Prefix/Suffix numbers of the plug assemblies must match prefix and suffix numbers of mating receptacles.

Shielded Data Link (SDL) Side Entry Receptacles with Panel and PCB Ground

Material and Finish

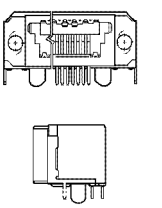
Housing — Polyester or Polysulfone, 94V-0 rated, black

Shield — Copper alloy, plated bright tin-lead

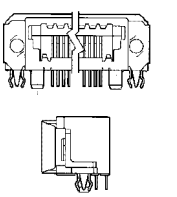
Contacts — Copper alloy, plated .000050 [0.00127] min. gold on mating area, tin-lead plated solder tails, all over nickel underplate

No. of Conductors	Key	Part Numbers		
		Panel Ground w/o Boardlocks	PCB Ground w/o Boardlocks	Boardlock Panel & PCB Ground
4	D	—	—	4-943036-1
	E	—	5-520459-1	5-943036-1
6	A	—	1-520459-2	1-943036-2
8	A	—	1-520459-3	1-493036-3
	C	—	3-520459-3	—
	E	—	5-520459-3	—
16	A	—	1-520459-6	1-493036-6
	E	5-520421-6	—	—

SDL Receptacle, front and side view Without Boardlocks



SDL Receptacle, front and side view With Boardlocks



Shielded Data Link (SDL) Side Entry Receptacles with Offset Flange and Panel Ground

Material and Finish

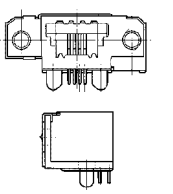
Housing — Polyester or Polysulfone, 94V-0 rated, black

Shield — Copper alloy, plated bright tin-lead

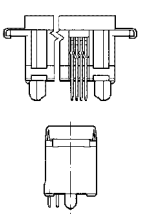
Contacts — Copper alloy, plated .000050 [0.00127] min. gold on mating area, tin-lead plated solder tails, all over nickel underplate

No. of Conductors	Key	Part Numbers	
		With Offset Flange	With Panel Ground
4	D	—	4-520422-1
	E	5-520501-1	5-520422-1
6	E	—	5-520422-2
8	A	—	1-520422-3
	E	5-520501-3	5-520422-3
16	A	—	1-520422-6
	E	5-520421-6	—

SDL Side Entry Receptacle with Offset Flange



SDL Side Entry Receptacle with Panel Ground



Printed Circuit Board Connectors

Table of Contents

Click Below

Section Two: Printed Circuit Board Connectors Click on section to go to that section.

See Next Page

AMP

Printed Circuit Board Connectors Click Below

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Receptacle Assemblies, Surface Mount, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Vertical Mount, Closed Top Entry with Holddowns

No. of Pos.	Part Nos.
10	535923-2
26	535923-3
40	535923-5

Notes: 1. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000150 [0.00381] tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Holddowns—Copper alloy, plated .000150 [0.00381] minimum tin-lead over .000050 [0.00127] nickel

Vertical Mount, Bottom Entry with Holddowns

No. of Pos.	Part Nos.
10	535959-1
20	535959-3
26	535959-2
30	535959-4
40	535959-5
50	535959-6
60	535959-7

Notes: 1. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000150 [0.00381] tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Holddowns—Copper alloy, plated .000150 [0.00381] minimum tin-lead over .000050 [0.00127] nickel

Breakaway Headers, Surface-Mount—Unshrouded Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post

No. of Pos.	Part Nos.
3	146128-1

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Posts—Phosphor bronze, plated as follows:

Plating—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Breakaway Headers, Surface-Mount—Unshrouded Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post

No. of Pos.	Part Nos.
10	146130-4
12	146130-5
20	146130-9
26	1-146130-2
30	1-146130-4

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Posts—Phosphor bronze, plated as follows:

Plating—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Receptacle Assemblies, Board Mount, Double-Row, Closed Entry, .100 [2.54] Centers

Horizontal Mount (with Guide Pin Slots and Standoffs)

Material and Finish:

Housing—Brown thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

No. of Pos.	Receptacle Assembly Part Nos. with .115 [2.92] Solder Tail Lengths			
	Standard Solder Tails		Board Retention Tails	
	Plating A	Plating B	Plating A	Plating B
12	532956-1	532955-1	534204-2	534975-5
14	—	2-532955-5	—	—
20	532956-3	532955-3	534204-9	—
24	532956-4	532955-4	1-534204-1	534975-7
30	532956-5	532955-5	534204-4	—
36	532956-6	532955-6	534204-3	—
40	532956-7	532955-7	1-534204-2	—
50	532956-8	532955-8	534204-1	1-534975-1
60	532956-9	532955-9	534204-5	—
70	—	1-532955-0	—	—
72	1-532956-1	—	—	—
80	1-532956-2	—	—	—
96	1-532956-5	—	—	—
100	1-532956-6	1-532955-6	—	534975-1
110	—	—	1-534204-6	—
120	1-532956-8	1-532955-8	—	—

Notes: 1. .115 [2.92] tail length is for use with .062 [1.57] PC boards; .145 [3.68] tail length is for use with .093 [2.36] PC boards.
2. Receptacle assemblies with low force contacts are available, consult AMP Incorporated.
3. .256 [6.50] minimum positive pin stop to prevent shorting between rows.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

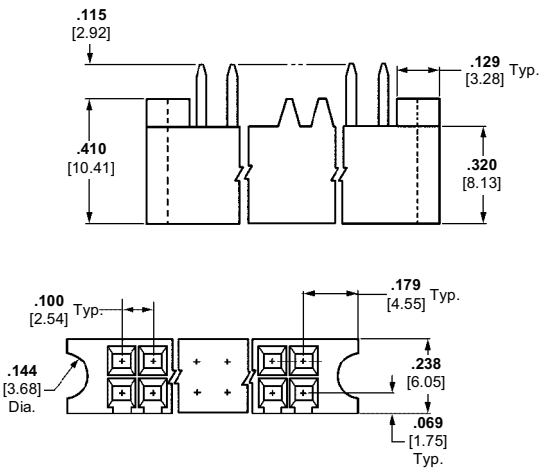
Receptacle Assemblies, Board Mount, Double-Row, Closed Entry, .100 [2.54] Centers

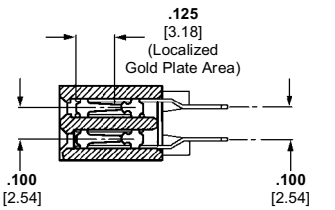
Vertical Mount (with Guide Pin Slots and Standoffs)

Material and Finish:

Housing—Brown thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact under-plated .000050 [0.00127] nickel





No. of Pos.	Part Nos.
50	534972-3

Receptacle Assemblies, Board Mount, Triple-Row, Closed Entry, .100 [2.54] Centers

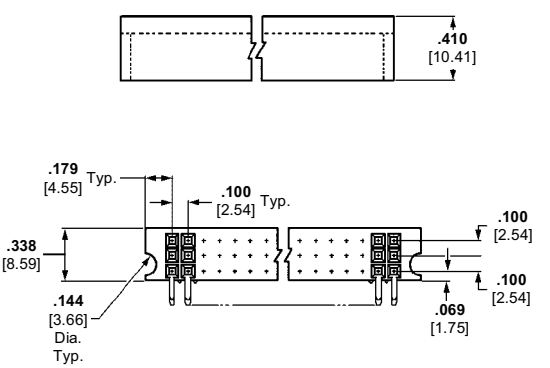
Horizontal Mount (with Guide Pin Slots and Standoffs)

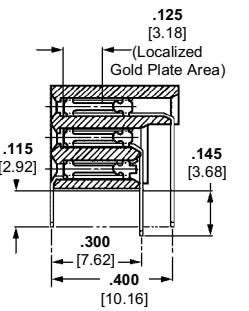
Material and Finish:

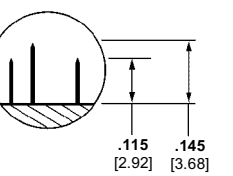
Housing—Brown thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, plated as follows:

Plating—Duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel







No. of Pos.	Part Nos.
150	534974-8

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Headers, Straight Post, Double-Row, .100 [2.54] Centers

Solder Posts and ACTION PIN Posts (with Pin Protection and Guide Pins)

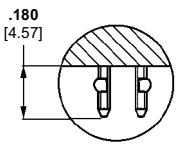
Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

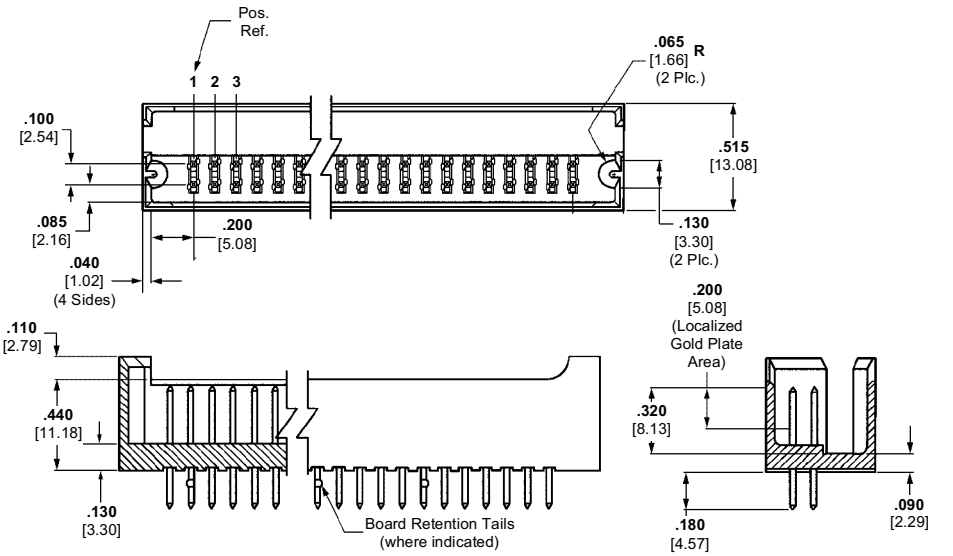
Posts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire post underplated .000050 [0.00127] nickel



.025 [0.64] Square Board Retention Tails

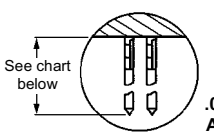


No. of Pos.	Header Part Nos. with .180 [4.57] Tail Length			
	Standard Solder Tails		Board Retention Tails	
	Plating A	Plating B	Plating A	Plating B
12	102692-1	102567-1	—	534257-5
14	—	2-102567-3	—	—
20	—	1-102567-1	—	—
24	102692-2	102567-2	—	534257-7
30	1-102692-7	1-102567-3	—	—
36	102692-3	102567-3	534978-6	—
40	1-102692-3	1-102567-2	534978-7	—
50	—	102567-6	534978-8	1-534257-5
60	102692-5	102567-4	534978-9	—
70	—	—	1-534978-5	—
80	—	102567-8	—	—
100	102692-8	—	—	—
110	—	—	1-534978-2	—

Note: Headers with make first/break last posts can be made available, consult AMP Incorporated.

ACTION PIN Post

.250 [6.35] Tail Length



.025 [0.64] Square ACTION PIN Tails

No. of Pos.	Part Nos.
12	102690-1
60	102690-5
80	102690-6
100	102690-8

Note: Headers with make first/break last posts can be made available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Headers, Right-Angle Post, Double-Row, .100 [2.54] Centers

Card Extender (with Pin Protection and Guide Pins)

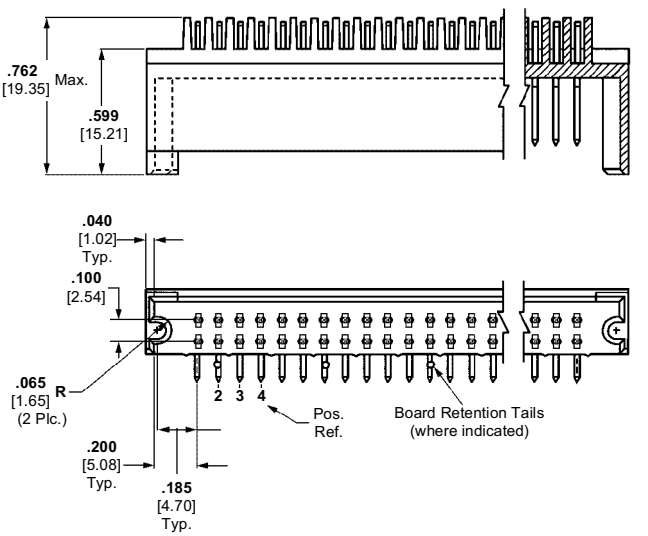
Material and Finish:

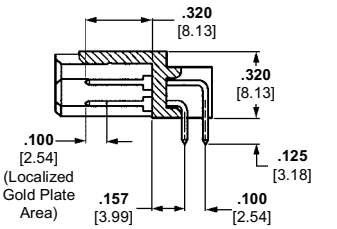
Housing—Black thermoplastic, 94V-0 rated

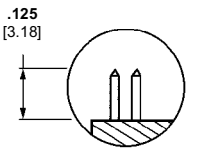
Posts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel







.025 [0.64] Square Board Retention Tails

No. of Pos.	Header Part Nos. with .125 [3.18] Tail Length		
	Standard Solder Tails		Board Retention Tails
	Plating A	Plating B	Plating A
20	—	1-102589-2	—
24	—	102589-6	—
30	—	102589-4	534245-2
40	102802-8	—	—
50	—	102589-5	—

Note: Headers with make first/break last posts can be made available, consult AMP Incorporated.

Mod. II Receptacle Assemblies, Single-Row, .100 [2.54] Centers

Closed Entry, End Stackable, Short Point-of-Contact, with Standoffs

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, plated as follows:

Plating—Duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

No.of Pos.	Part Nos.
5	535676-4
6	535676-5
8	535676-7

Notes: 1. AMP, part number, date code and word "front" stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

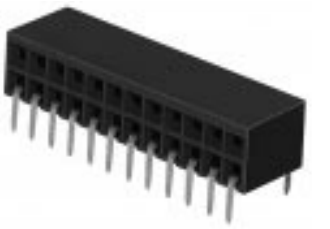
Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Mod. II Receptacle Assemblies, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Closed Entry, End Stackable, Short Point-of-Contact, with Standoffs



No. of Pos.	Contact Plating/Part Nos.	
	Plating A	Plating B
4	6-535512-1	—
8	6-535512-3	—
10	6-535512-4	146140-4
12	535512-1	—
14	1-535512-7	—
16	1-535512-8	—
20	535512-2	—
24	535512-3	—
26	2-535512-0	—
30	2-535512-2	—
34	535512-4	—
40	2-535512-5	—
50	535512-7	—
60	3-535512-0	—

Notes: 1. AMP, part number, date code and word "front" stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
3. .256 [6.50] minimum positive pin stop to prevent shorting between row.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Mod. II Receptacle Assemblies, Single-Row, .100 [2.54] Centers

Closed Top Entry, End Stackable, with Single Tine Contacts

No. of Pos.	Part Nos.
3	534237-1
4	534237-2
5	534237-3
6	534237-4
7	534237-5
8	534237-6

No. of Pos.	Part Nos.
10	1-534237-8
12	534237-0
14	1-534237-2
16	1-534237-4
20	1-534237-8

Notes: 1. AMP part number and date code stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
3. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Mod. II Receptacle Assemblies, Double-Row, .100 X .100 [2.54 x 2.54] Centers

Closed Top Entry, End Stackable .100 x .100 [2.54 x 2.54] Mounting Pattern

No. of Pos.	Part Nos.
2	534206-1
4	534206-2
6	534206-3
8	534206-4
10	534206-5
12	534206-6
14	534206-7
16	534206-8

No. of Pos.	Part Nos.
18	1-534206-0
20	1-534206-2
24	1-534206-3
26	1-534206-4
28	1-534206-6
34	1-534206-7
36	1-534206-8
40	2-534206-0

Notes: 1. AMP part number and date code stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
3. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Mod. IV Receptacle Assemblies, Single-Row, .100 [2.54] Centers

Closed Top Entry, End Stackable, Low Profile with Single Tine Contacts

No. of Pos.	Part Nos.
5	535541-3
8	535541-6
10	535541-8
11	535541-9
12	1-535541-0

No. of Pos.	Part Nos.
13	1-535541-1
14	1-535541-2
16	1-535541-4
18	1-535541-6
20	1-535541-8

Notes: 1. AMP part number and date code stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
3. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze, plated as follows:

Plating—Duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Mod. IV Receptacle Assemblies, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Closed Top Entry, End Stackable, Low Profile, .100 x .100 [2.54 x 2.54] Mounting Pattern

No.of Pos.	Contact Plating/Part Nos.		
	Plating A	Plating B	Plating C
8	534998-4	—	—
10	534998-5	—	—
12	534998-6	—	—
14	534998-7	—	—
16	534998-8	—	—
20	1-534998-0	—	1-535585-0
24	1-534998-2	—	—
26	1-534998-3	—	—
30	1-534998-5	—	—
32	1-534998-6	—	—
34	1-534998-7	—	—
36	1-534998-8	—	—
40	2-534998-0	2-535598-0	—
50	2-534998-5	—	—
60	3-534998-0	—	—

Notes: 1. AMP part number and date code stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
3. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel

Closed Top Entry, High Temperature Compatible, End and Side Stackable, Low Profile, .100 x .100 [2.54 x 2.54] Mounting Pattern

No. of Pos.	Part Nos.
10	146219-2

Notes: 1. AMP part number and date code stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
3. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Mod. IV Receptacle Assemblies, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Bottom Entry, End Stackable, Low Profile, .100 x .300 [2.54 x 7.62] Mounting Pattern

No. of Pos.	Part Nos.
11	534267-7
12	534267-8
14	534267-1
20	534267-2
24	534267-9
30	1-534267-2
36	1-534267-5

Notes: 1. AMP part number and date code stamped on housing where size permits.
2. AMP recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
3. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

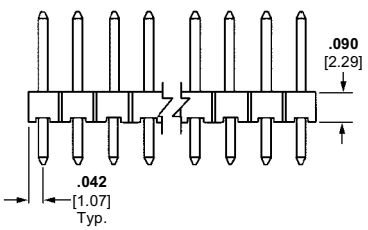
Material and Finish:

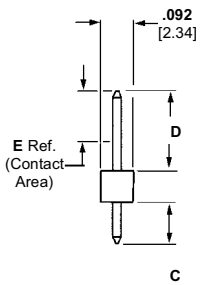
Housing—Black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

Breakaway Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post





Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

No. of Pos.	C = .090 [2.29] D = .230 [5.84] E = .185 [4.70] Post Plating/Part Nos.		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70] Post Plating/Part Nos.		C = .125 [3.18] D = .318 [8.08] E = .200 [5.08] Post Plating/Part Nos.		
	Plating A	Plating C	Plating B	Plating C	Plating A	Plating B	Plating C
1	—	—	103185-1	—	—	—	—
2	103747-2	103741-2	103185-2	103327-2	102976-2	102972-2	103321-2
3	103747-3	103741-3	103185-3	103327-3	102976-3	102972-3	103321-3
4	103747-4	—	103185-4	103327-4	—	—	103321-4
5	—	—	103185-5	—	—	—	103321-5
6	—	—	—	—	—	—	103321-6
8	103747-8	—	103185-8	103327-8	102976-8	102972-8	103321-8
10	—	—	—	1-103327-0	—	—	—
12	—	—	1-103185-2	—	—	—	—
14	—	—	—	1-103327-4	—	—	—
20	—	—	—	—	—	2-102972-0	—
40	4-103747-0	4-103741-0	4-103185-0	4-103327-0	4-102976-0	4-102972-0	4-103321-0

Notes: 1. Other tail lengths are available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Breakaway Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Right-Angle Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

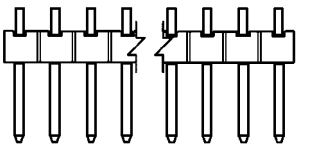
Posts—Phosphor bronze, plated as follows:

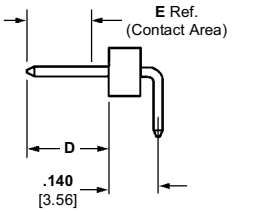
Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

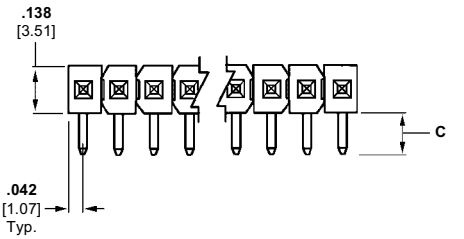
Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Printed Circuit Board Connectors (Continued)







No. of Pos.	C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08]		
	Post Plating/Part Nos.		Post Plating/Part Nos.			Post Plating/Part Nos.		
	Plating A	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	—	—	—	—	103329-2	—	—	—
3	—	—	—	—	103329-3	—	—	—
4	—	103759-4	—	103325-4	—	—	—	—
12	—	—	—	—	—	—	—	1-103323-2
36	—	—	—	—	—	—	—	3-103323-6
40	4-103765-0	4-103759-0	4-103148-0	4-103325-0	4-103329-0	4-102978-0	4-102974-0	4-103323-0

Notes: 1. Other tail lengths are available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Breakaway Headers—Unshrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight-Angle Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

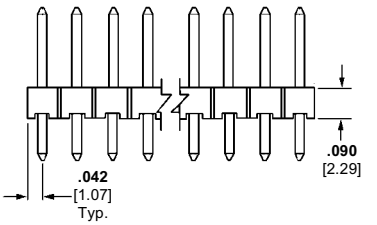
Posts—Phosphor bronze, plated as follows:

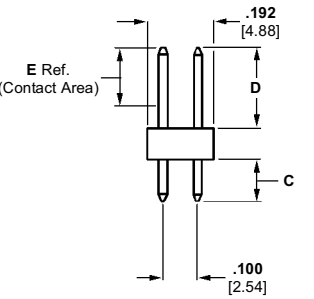
Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Printed Circuit Board Connectors (Continued)





No. of Pos.	C = .090 [2.29] D = .230 [5.84] E = .185 [4.70] Post Plating/Part Nos.		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70] Post Plating/Part Nos.			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08] Post Plating/Part Nos.		
	Plating A	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	—	—	—	103186-1	—	—	102973-1	—
4	—	—	103240-2	103186-2	—	102977-2	—	—
6	—	—	103240-3	103186-3	103328-3	102977-3	—	—
8	103783-4	—	103240-4	103186-4	103328-4	102977-4	102973-4	—
10	—	103777-5	103240-5	103186-5	103328-5	102977-5	102973-5	103322-5
12	—	103777-6	103240-6	103186-6	—	102977-6	102973-6	—
14	103783-7	103777-7	103240-7	103186-7	103328-7	102977-7	102973-7	103322-7
16	—	—	103240-8	103186-8	—	102977-8	102973-8	—
18	—	—	—	103186-9	—	—	—	—
20	1-103783-0	—	1-103240-0	1-103186-0	1-103328-0	1-102977-0	1-102973-0	1-103322-0
24	1-103783-2	—	—	—	—	—	—	—
26	—	—	1-103240-3	1-103186-3	1-103328-3	1-102977-3	—	—
32	—	—	—	1-103186-6	—	—	—	—
34	—	—	—	—	1-103328-7	—	1-102973-7	—
40	—	—	2-103240-0	—	—	—	2-102973-0	—
50	—	—	—	2-103186-5	—	—	2-102973-5	—
60	—	—	—	3-103186-0	—	—	—	—
62	—	—	—	3-103186-1	—	—	—	—
72	—	—	—	—	3-103328-6	—	—	—
80	4-103783-0	4-103777-0	4-103240-0	4-103186-0	4-103328-0	4-102977-0	4-102973-0	4-103322-0

Notes: 1. Other tail lengths are available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Breakaway Headers—Unshrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Right-Angle Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

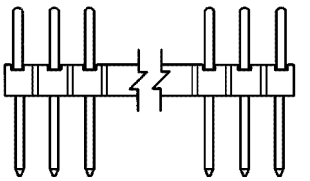
Posts—Phosphor bronze, plated as follows:

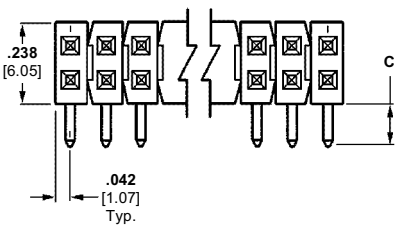
Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

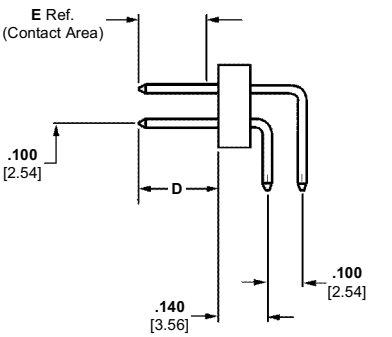
Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Printed Circuit Board Connectors (Continued)







No. of Pos.	C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]	C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .110 [2.74] D = .318 [8.08] E = .200 [5.08]		
	Post Plating/Part Nos.	Post Plating/Part Nos.			Post Plating/Part Nos.		
	Plating A	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
8	—	—	—	—	—	102975-4	—
10	103801-5	—	—	103330-5	—	—	—
20	—	—	—	—	—	—	1-103324-0
26	—	—	1-103326-3	—	—	—	—
80	4-103801-0	4-103149-0	4-103326-0	4-103330-0	4-102979-0	4-102975-0	4-103324-0

Notes: 1. Other tail lengths are available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Retention Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post (with Board Retention Feature)

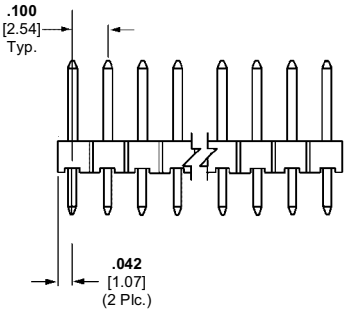
Material and Finish:

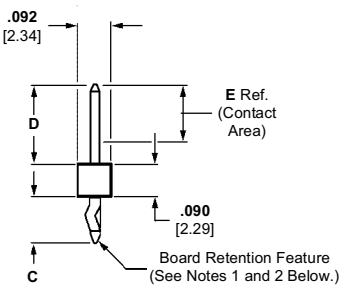
Housing—Black thermoplastic, 94V-0 rated

Posts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel





No. of Pos.	C = .120 [3.05] D = .230 [5.84] E = .185 [4.70] Post Plating/Part Nos.		C = .125 [3.18] D = .318 [8.08] E = .200 [5.08] Post Plating/Part Nos.	
	Plating A	Plating B	Plating A	Plating B
3	104344-1	104345-1	104426-1	104427-1

Notes: 1. Board retention using kinked tails are for headers 6 positions and smaller; headers 7 positions and larger use swaged tails.
2. Refer to the product drawing to determine the number and location of the board retention tails.
3. Other tail lengths are available, consult AMP Incorporated.

Retention Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Right-Angle Post (with Board Retention Feature)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

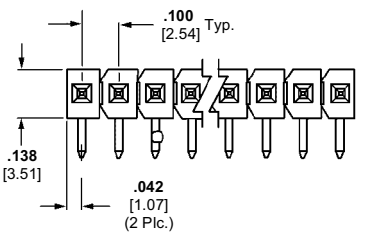
Posts—Phosphor bronze, plated as follows:

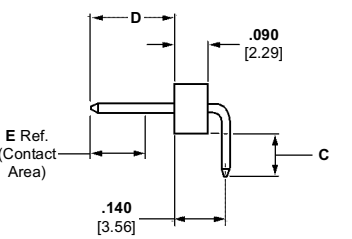
Plating—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Performance Characteristics:

Insertion Force—12 lb. [53.4N] maximum

Retention Force—.25 lb. [1.11N] minimum





No. of Pos.	C = .120 [3.05] D = .230 [5.84] E = .185 [4.70] Part Nos.
6	104349-4
20	1-104349-8

Notes: 1. Refer to the product drawing to determine the number and location of the board retention tails.
2. Other tail lengths are available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Retention Headers—Unshrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post (with Board Retention Feature)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

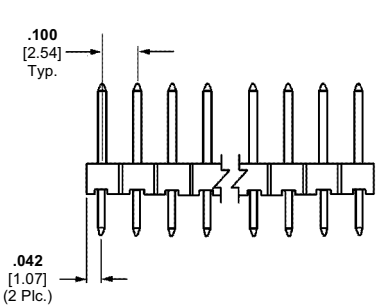
Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

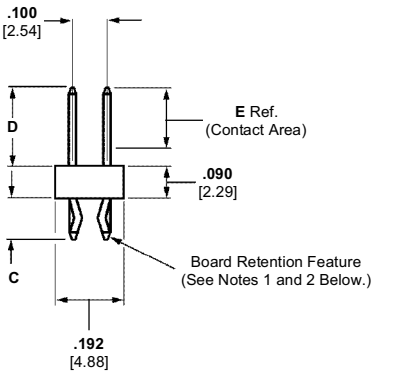
Performance Characteristics:

Insertion Force—12 lb. [53.4N] maximum

Retention Force—.25 lb. [1.11N] minimum

Printed Circuit Board Connectors (Continued)





No. of Pos.	C = .120 [3.05] D = .230 [5.84] E = .185 [4.70] Post Plating/Part Nos.			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08] Post Plating/Part Nos.	
	Plating A	Plating B	Plating C	Plating A	Plating B
2	104350-1	104351-1	104352-1	104432-1	104433-1
4	104350-2	—	—	—	—
6	—	—	—	104432-3	104433-3
8	104350-4	104351-4	—	104432-4	104433-4
10	104350-5	104351-5	—	—	104433-5
12	104350-6	—	—	104432-6	—
16	104350-8	—	—	—	104433-8
20	1-104350-0	—	—	—	1-104433-0
26	—	—	—	—	1-104433-3

Notes: 1. Board retention using kinked tails are for headers 6 positions and smaller; headers 7 positions and larger use swaged tails.
2. Refer to the product drawing to determine the number and location of the board retention tails.
3 .Other tail lengths are available, consult AMP Incorporated.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Retention Headers—Unshrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Right-Angle Post (with Board Retention Feature)

Material and Finish:

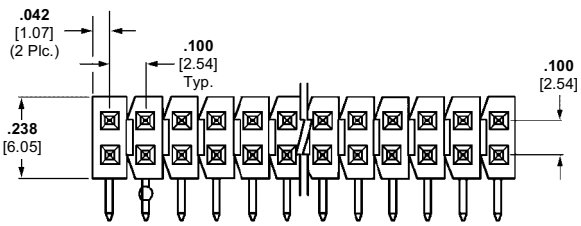
Housing—Black thermoplastic, 94V-0 rated

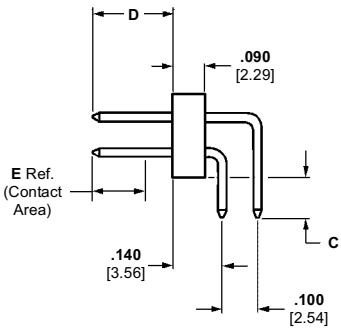
Posts—Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post





No. of Pos.	C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]		
	Post Plating/Part Nos.		
	Plating A	Plating B	Plating C
10	104353-5	104354-5	—
20	—	—	1-104355-0

Notes: 1. Refer to the product drawing to determine the number and location of the board retention tails.
2. Other tail lengths are available, consult AMP Incorporated.

Standard Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post

Material and Finish:

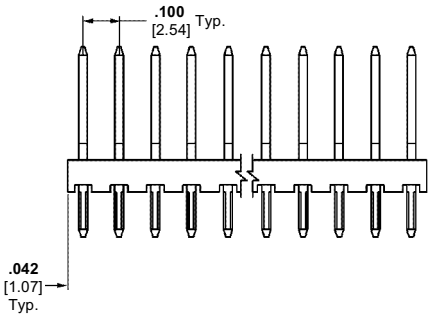
Housing—Black thermoplastic, 94V-0 rated

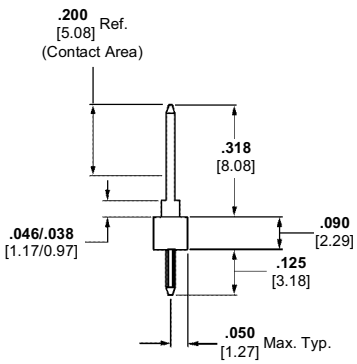
Posts—Copper alloy, plated as follows:

Plating A—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Tin-Lead/Nickel—Plating option available; minimum order quantities may apply. Consult AMP Incorporated





No. of Pos.	Post Plating/Part Nos.	
	Plating A	Plating B
1	87220-1	87224-1
2	87220-2	87224-2
3	87220-3	87224-3
4	87220-4	87224-4
5	87220-5	87224-5
6	87220-6	87224-6
7	87220-7	—
8	87220-8	87224-8
10	—	1-87224-0

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Standard Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Right-Angle Post

Material and Finish:

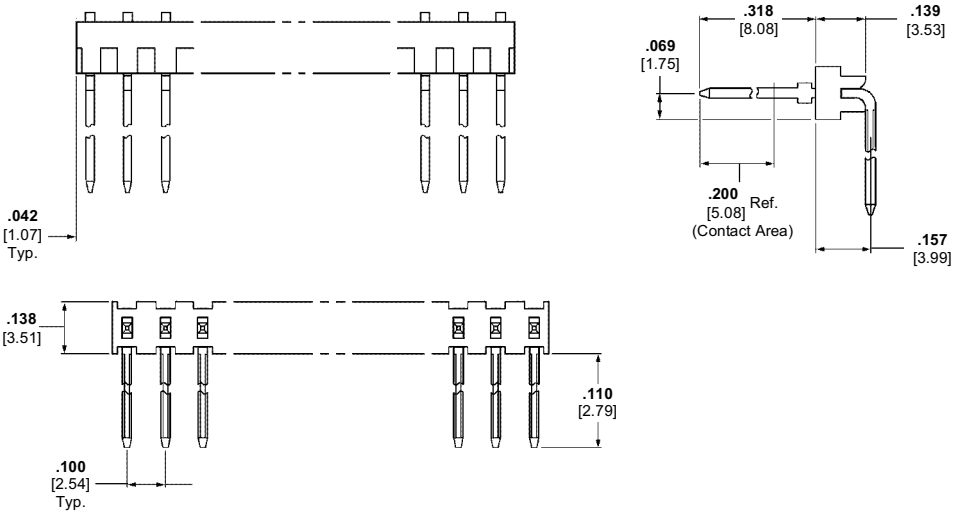
Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Tin-Lead/Nickel—Plating option available; minimum order quantities may apply. Consult AMP Incorporated



No. of Pos.	Post Plating/Part Nos.	
	Plating A	Plating B
3	87232-3	—
4	87232-4	—
5	—	87233-5
6	—	87233-6
10	1-87232-0	—

Standard Headers—Unshrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post

Material and Finish:

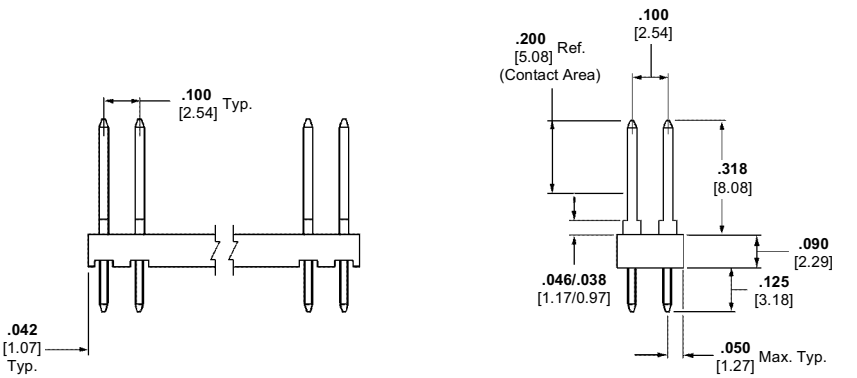
Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Tin-Lead/Nickel—Plating option available; minimum order quantities may apply. Consult AMP Incorporated



No. of Pos.	Post Plating/Part Nos.	
	Plating A	Plating B
2	1-87215-0	87227-1
4	1-87215-1	87227-2
6	1-87215-2	87227-3
8	87215-1	87227-4
10	87215-2	87227-5
12	87215-3	87227-6
14	87215-4	87227-7
16	87215-5	87227-8
20	87215-7	1-87227-0
40	2-87215-0	—
50	2-87215-5	2-87227-5

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Standard Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Right-Angle Post

Material and Finish:

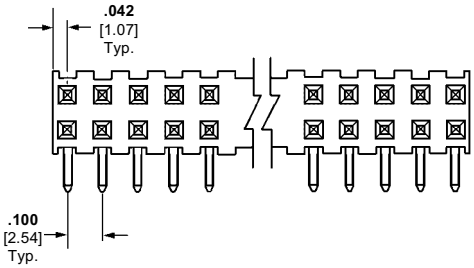
Housing—Black thermoplastic, 94V-0 rated

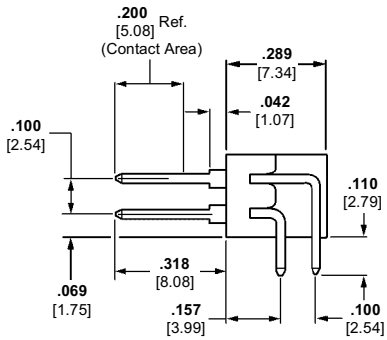
Posts—Copper alloy, plated as follows:

Plating A—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Tin-Lead/Nickel—Plating option available; minimum order quantities may apply. Consult AMP Incorporated





No. of Pos.	Post Plating/Part Nos.	
	Plating A	Plating B
6	1-86479-5	—
8	1-86479-6	87230-4
10	86479-3	87230-5
12	86479-4	—
14	86479-5	87230-7
16	86479-2	—
20	86479-1	1-87230-0
30	1-86479-9	—
50	2-86479-9	—

Standard Headers—Unshrouded, Triple-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, duplex plated 000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

No.of Pos.	Part Nos.
12	103817-2
24	103817-6
30	103817-8

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

ACTION PIN Headers—Unshrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Posts—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire post underplated .000050 [0.00127] nickel

No. of Pos.	For .093-.125 [.236-3.18] Thick PC Boards
2	3-102898-4
3	4-102898-0
5	3-102898-8
8	102898-1

ACTION PIN Headers—Unshrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Posts—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire post underplated .000050 [0.00127] nickel

No. of Pos.	For .093-.125 [.236-3.18] Thick PC Boards
4	103233-1
6	103233-2
8	103233-3
10	103233-4
12	103233-5
16	103233-7
24	1-103233-1
26	1-103233-2
50	2-103233-4
60	2-103233-9

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Standard Profile Headers—Shrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post (with Standoffs)

No. of Pos.	Post Plating/Part Nos.		
	Plating A	Plating B	Plating C
3	—	—	103080-1
4	103414-2	102202-1	103080-2
5	103414-3	102202-2	103080-3
6	103414-4	102202-3	—
7	—	102202-4	103080-5
8	103414-6	102202-5	103080-6
9	103414-7	102202-6	—
10	103414-8	102202-7	103080-8
11	—	102202-8	—
12	1-103414-0	102202-9	—
13	—	1-102202-0	—
14	—	1-102202-1	—
16	1-103414-4	1-102202-3	—
18	—	1-102202-5	—
20	—	1-102202-7	—

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Standard Profile Headers—Shrouded, Single-Row, .100 [2.54] Centers

.025 [0.64] Square Right-Angle Post (with Standoffs)

No. of Pos.	Post Plating/Part Nos.		
	Plating A	Plating B	Plating C
3	103361-1	—	—
4	103361-2	102203-1	102523-1
5	103361-3	102203-2	—
6	103361-4	102203-3	—
7	103361-5	102203-4	—
8	103361-6	102203-5	102523-6
9	—	102203-6	—
10	103361-8	102203-7	—
12	1-103361-0	102203-9	—
14	—	1-102203-1	—
16	—	1-102203-3	—
20	—	1-102203-7	—

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Standard Profile Headers—Shrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post (with Detent Windows)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

End Dimension	No. of Pos.	Post Plating/Part Nos.		
		Plating A	Plating B	Plating C
.066 [1.68]	6	103168-1	102618-1	—
	8	103168-2	102618-2	—
	10	103168-3	102618-3	87589-1
	12	103168-4	102618-4	87589-2
	14	103168-5	102618-5	87589-3
	16	103168-6	102618-6	—
	18	103168-7	102618-7	87589-5
	20	103168-8	102618-8	—
	22	103168-9	—	—
	24	1-103168-0	1-102618-0	—
	26	1-103168-1	1-102618-1	87589-9
	30	—	1-102618-3	—
	32	1-103168-4	—	—
	34	1-103168-5	1-102618-5	—
	40	1-103168-8	—	—
	50	2-103168-3	2-102618-3	—
	60	2-103168-8	—	—
.150 [3.81]	6	1031691	—	—
	8	103169-2	—	—
	10	103169-3	102619-3	—
	12	103169-4	—	—
	14	103169-5	102619-5	—
	16	103169-6	102619-6	—
	18	103169-7	—	—
	20	103169-8	102619-8	—
	24	—	1-102619-0	—
	26	1-103169-1	1-102619-1	—
	28	1-103169-2	—	—
	30	1-103169-3	1-102619-3	—
	34	1-103169-5	1-102619-5	—
	40	1-103169-8	1-102619-8	—
	50	2-103169-3	2-102619-3	—
	60	2-103169-8	—	—

Standard Profile Headers—Shrouded, with .150 [3.81] End Dimension, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post (with Plastic Holddowns)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

No. of Pos.	Part Nos.
40	1-104317-2

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

Standard Profile Headers—Shrouded, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Right-Angle Post (with Detent Windows)

End Dimension	No. of Pos.	Post Plating/Part Nos.		
		Plating A	Plating B	Plating C
.066 [1.68]	6	103166-1	102617-1	3-87579-5
	8	103166-2	102617-2	—
	10	103166-3	102617-3	87579-2
	12	103166-4 103164-4[1]	—	—
	14	103166-5	—	—
	16	103166-6 103164-6[1]	102617-6	—
	18	103166-7	—	87579-6
	20	103166-8	102617-8	—
	40	1-103166-8	—	—
	50	2-103166-3	—	—
.150 [3.81]	8	—	102570-2	—
	10	103167-2	102570-3	—
	12	103167-3	—	—
	14	103167-4	—	—
	16	—	102570-6	—
	20	103167-7	102570-8	—
	40	1-103167-7	102570-1	—

[1]Pin protection on 3 sides.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

.025 [0.64] Square Right-Angle Post (with Pin Protection on 3 Sides)

No. of Pos.	Part Nos.
12	103164-4
16	103164-6

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Standard Profile Headers—Shrouded, with .150 [3.81] End Dimension, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post (with Detent Windows and Mounting Ears)

No. of Pos.	Part Nos.
10	87474-1
20	87474-2

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Printed Circuit Board Connectors (Continued)

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Standard Profile Headers—Shrouded Bulkhead Type, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post (with Detent Windows and Mounting Ears)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

End Dimension	No. of Pos.	Part Nos.
.066 [1.68]	34	1-87608-3
.066/.150 [1.68/3.81]	24	87496-9
.150 [3.81]	34	1-87605-3
	50	2-87605-1

ACTION PIN Headers—Shrouded with .066 [1.68] End Dimension, Double-Row, .100 x .100 [2.54 x 2.54] Centers

.025 [0.64] Square Straight Post (with Detent Windows, for .093-.125 [.236-3.18] Thick PC Board)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated, high temperature compatible

Posts—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, with entire post underplated .000050 [0.00127] nickel

End Dimension	No. of Pos.	Header Part Nos.
.066 [1.68]	6	102699-2
	8	102699-3
	10	102699-4
	12	102699-5
	16	102699-7
	20	102699-9
	30	1-102699-4
	60	2-102699-8
.150 [3.81]	10	102557-9
	40	102557-1

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Board-to-Board)

Printed Circuit Board Connectors (Continued)

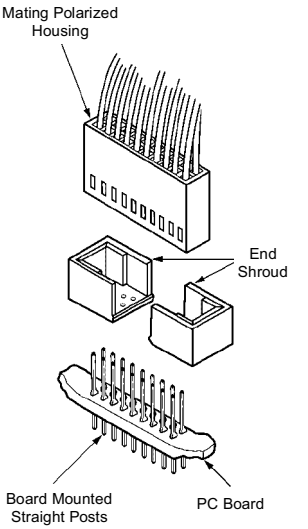
Accessories: End Shrouds for Machine-Applied Posts

Double-Row, .100 x .100 [2.54 x 2.54] Centers

Material:

Black glass-filled polyester

Part No. 102114-1



Stacking Connectors, Shrouded

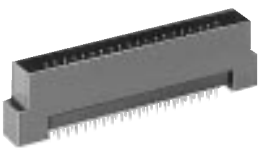
Headers, Double-Row .025 x .025 [0.64 x 0.64] Straight Post (with Pin Protection)

Material and Finish:

Housing—Brown glass-filled thermoplastic, flame retardant

Posts—Phosphor bronze, duplex plated .000015 [0.00038] gold on mating area, .000100-.000200 [0.00254-0.00508] tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

No. of Pos.	Height	Header Part No.
52	**.785** [19.94]	102871-1
52	**1.200** [30.48]	102826-1



Receptacle Assemblies, Double-Row Board Mounted

Vertical Mount, Top Entry, High Profile, Selectively Loaded (with Standoffs)

Material and Finish:

Housing—Brown thermoplastic, flame retardant

Contacts—Phosphor bronze, duplex plated .000015 [0.00038] gold on mating area, .000050-.000100 [0.00127-0.00254] bright tin-lead on solder area, with entire contact underplated .000050 [0.00127] nickel

No. of Pos.	Receptacle Assembly Part No.
60[1] (52 Active)	102766-4

[1]In addition to the active positions, each receptacle has four cavities on each end that are not loaded with contacts. These empty cavities aid in aligning the receptacle with header posts during mating.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

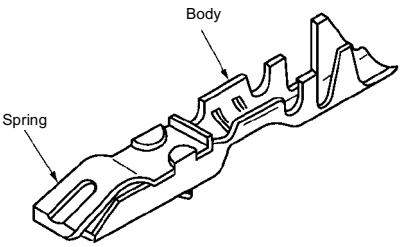
Locking Clip Contacts

Wire Crimp Contacts with Insulation Support Material and Finish:

Contact Spring—Stainless steel

Plating B—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating C—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel on entire contact



Wire Size Range		Ins. Dia. Range	Finish	Part Nos.	
AWG	[mm2]			Strip Form	Loose Piece
30-28	0.05-0.09	**.029-.039** 0.74-0.49	Plating B	—	87191-1
			Plating C	—	87191-2
26-22	0.12-0.4	**.038-.062** 0.97-1.57	Plating B	87124-1	87165-1
			Plating C	87124-2	87165-2
20	0.5-0.6	**.038-.062** 0.97-1.57	Plating B	867052-2	—
			Plating C	867052-1	—

Wire-Applied Housings for Locking Clip Contacts, Single-Row, .100 [2.54] Centers

Material:

Glass-filled polyester, 94V-0 rated

Housing Configuration: Both ends closed

No. of Pos.	Housing Part Nos. (Unstamped)
1	87175-2
2	87175-6
3	87175-8
4	1-87175-0
5	1-87175-2
6	1-87175-4
7	1-87175-6
10	2-87175-2

Wire-Applied Housings for Locking Clip Contacts, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Material:

Glass-filled polyester, 94V-0 rated

Housing Configuration: Both ends closed

No. of Pos.	Housing Part Nos. (Unstamped)
4	87133-1
6	87133-7
10	87133-2

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Mod. IV Pin and Receptacle Contacts

Crimp Snap-In (No-strip) Receptacles and Crimp Snap-In Pins with Insulation Support (Standard Pressure)

Material and Finish:

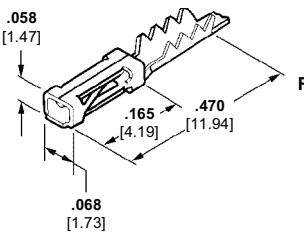
Beryllium copper or phosphor bronze (see charts), plated as follows:

Plating A—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

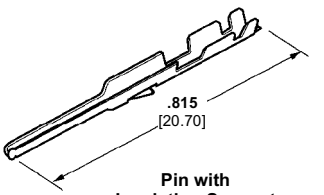
Plating B—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating C—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000030 [0.00076] nickel on entire contact

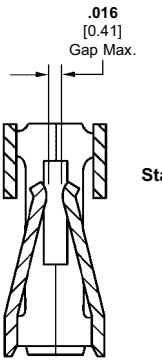
Printed Circuit Board Connectors (Continued)



No-Strip Receptacle



Pin with Insulation Support



Standard Pressure Configuration

Crimp Snap-In (No-strip) Receptacles

Ins. Dia. Range	Finish	Part Nos.	
		Strip Form	Loose Piece
.040-.055 1.02-1.40	Plating A	—	102348-2
	Plating C	87107-6	—

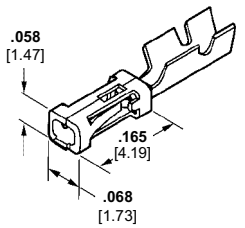
Crimp Snap-In Pins with Insulation Support

Wire Size Range		Ins. Dia. (Max.)	Finish	Part Nos.	
AWG	[mm2]			Strip Form	Loose Piece
26-22	0.12-0.4	**.061** 1.55	Plating A	—	102107-2
			Plating B	—	102107-1
			Plating C	102095-4	102107-3

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Mod. IV Receptacle Contacts

Crimp Snap-In Receptacles with Insulation Support (Standard, Intermediate and High Pressure)



Material and Finish:

Beryllium copper, phosphor bronze or copper-tin-phosphor bronze (see charts, page 139), plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead on crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C—Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating D—Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

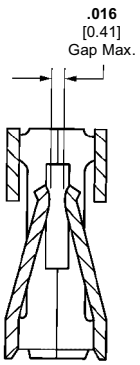
Plating E—.000100-.000200 [0.00254-0.00508] bright tin-lead over .000030 [0.00076] nickel on entire contact

Printed Circuit Board Connectors (Continued)

Standard Pressure (Mod. IV)

Wire Size Range AWG	Wire Size Range [mm2]	Ins. Dia. (Max.)	Material	Finish	Part Nos. Strip Form	Part Nos. Loose Piece
32-27	0.03-0.1	.040 1.02	Cu-Sn-Ph Bz	Plating A	102316-8	1-102316-4
			Cu-Sn-Ph Bz	Plating B	102316-6	1-102316-3
			Be Cu	Plating C	102917-1	102917-2
			Be Cu	Plating D	102917-5	—
			Cu-Sn-Ph Bz	Plating E	102316-5	—
26-22	0.12-0.4	.061 1.55	Cu-Sn-Ph Bz	Plating A	1-87756-7	1-87756-8
			Cu-Sn-Ph Bz	Plating B	1-87756-2	1-87756-6
			Cu-Sn-Ph Br	Plating E	87756-6	87756-7
			Be Cu	Plating C	87666-2	87667-2
			Be Cu	Plating D	87666-5	87667-5
			Be Cu	Plating E	87666-3	87667-3
24-20	0.2-0.6	.069 1.75	Cu-Sn-Ph Bz	Plating A	1-87523-8	1-87523-9
			Cu-Sn-Ph Bz	Plating B	1-87523-5	1-87523-6
			Be Cu	Plating C	85969-8	86016-2
			Be Cu	Plating D	85969-6	86016-5
			Cu-Sn-Ph Br	Plating E	87523-5	87523-6
			Be Cu	Plating E	85969-9	86016-3

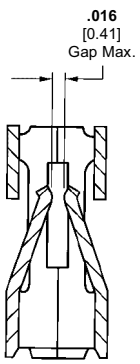
Standard Pressure



Intermediate Pressure (Mod. IV.v)

Wire Size Range AWG	Wire Size Range [mm2]	Ins. Dia. (Max.)	Material	Finish	Part Nos. Strip Form	Part Nos. Loose Piece
32-27	0.03-0.1	.040 1.02	Cu-Sn-Ph Bz	Plating A	102920-1	102920-2
			Be Cu	Plating C	102918-1	102918-2
26-22	0.12-0.4	.061 1.55	Cu-Sn-Ph Bz	Plating A	103171-4	103171-5
			Cu-Sn-Ph Bz	Plating B	103171-1	—
			Be Cu	Plating C	102548-5	102548-6
			Be Cu	Plating D	102548-1	102548-3
			Cu-Sn-Ph Bz	Plating A	2-87195-0	2-87195-1
24-20	0.2-0.6	.069 1.75	Cu-Sn-Ph Bz	Plating B	1-87195-7	1-87195-8
			Be Cu	Plating C	86492-6	87046-3
			Be Cu	Plating D	86492-2	87046-1
			Be Cu	Plating E	86492-9	87046-4

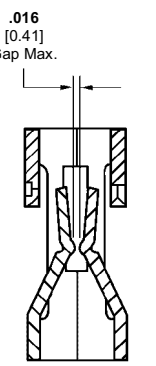
Intermediate Pressure



High Pressure (Mod. V)

Wire Size Range AWG	Wire Size Range [mm2]	Ins. Dia. (Max.)	Material	Finish	Part Nos. Strip Form	Part Nos. Loose Piece
32-27	0.03-0.1	.040 1.02	Ph Bz	Plating C	103455-1	103455-2
26-22	0.12-0.4	.061 1.55	Ph Bz	Plating C	87809-1	102128-1
			Ph Bz	Plating E	87809-2	102128-2
24-20	0.2-0.6	.069 1.75	Ph Bz	Plating C	87309-9	1-87309-4
			Ph Bz	Plating E	87309-8	1-87309-3

High Pressure



AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

Mod. IV Wire-Applied Housings, Single-Row, .100 [2.54] Centers

Non-Polarized

Material:

Black thermoplastic, flame retardant

No. of Pos.	Part Nos.	
	Stamped[1]	Unstamped[2]
1	—	7-87499-2
2	87499-3	87499-4
3	87499-5	87499-6
4	87499-7	87499-8
5	87499-9	1-87499-0
6	1-87499-1	1-87499-2
7	87499-1	27499-2
8	1-87499-3	—
10	1-87499-7	1-87499-8
11	1-87499-9	—
12	2-87499-1	2-87499-2
13	2-87499-3	—
14	2-87499-5	2-87499-6
16	2-87499-9	—
20	3-87499-7	—

[1]Cavity identification, part number and date code stamped on housing where size permits.
[2]No marking on housing.

Polarized (with Detent Latching)

Material:

Black thermoplastic, flame retardant

No. of Pos.	Part Nos. Unstamped[1]
3	102241-1
4	102241-2
5	102241-3
6	102241-4
7	102241-5
8	102241-6
9	102241-7
10	102241-8
12	1-102241-0
14	1-102241-2
16	1-102241-4
18	1-102241-6
20	1-102241-8

[1]No marking on housing.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

Mod. IV Wire-Applied Housings, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Non-Polarized

Material:
Black thermoplastic, flame retardant

No. of Pos.	Part Nos.	
	Stamped[1]	Unstamped[2]
2	—	5-87456-3
4	5-87456-0	4-87456-9
6	87456-2	87456-1
8	87456-4	87456-3
10	87456-6	87456-5
12	87456-8	87456-7
14	87456-0	87456-9
16	87456-2	1-87456-1
18	87456-4	—
20	87456-6	1-87456-5
24	2-87456-0	1-87456-9
26	2-87456-2	—
30	2-87456-6	2-87456-5
34	3-87456-0	2-87456-9
40	3-87456-6	—
50	4-87456-0	3-87456-9

[1]Cavity identification, AMP, part number and date code stamped on housing where size permits.
[2]No marking on housing.

Polarized

Material:
Black thermoplastic, flame retardant

No. of Pos.	Part Nos.	
	Stamped[1]	Unstamped[2]
6	87977-1	2-87977-8
8	87977-2	2-87977-9
10	87977-3	3-87977-0
12	87977-4	—
14	—	3-87977-2
16	—	3-87977-3
20	—	3-87977-5
24	1-87977-0	—

[1]Cavity identification, AMP, part number and date code stamped on housing where size permits.
[2]No marking on housing.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Mod. IV Wire-Applied Housings, Double-Row, .100 x .100 [2.54 x 2.54] Centers

Polarized (with Detent Latching, with and without Strain Relief/Pull Tab)

Material:

Black thermoplastic, flame retardant

Printed Circuit Board Connectors (Continued)

No. of Pos.	No. of Detents	Part Nos. Without Strain Relief Stamped[1]	Part Nos. Without Strain Relief Unstamped[2]	Part Nos. With Strain Relief Stamped[1]
6	1	87631-2	87631-1	—
8	1	87631-4	87631-3	—
10	1	87631-6	87631-5	87922-1
12	1	87631-8	87631-7	87922-2
14	1	1-87631-0	87631-9	87922-3
16	1	1-87631-2	1-87631-1	87922-4
18	1	1-87631-4	1-87631-3	87922-5
20	2	1-87631-6	1-87631-5	87733-1
24	2	2-87631-0	1-87631-9	87733-3
26	2	2-87631-2	2-87631-1	87733-4
30	2	2-87631-6	2-87631-5	87733-6
32	2	2-87631-8	2-87631-7	—
34	2	3-87631-0	2-87631-9	87733-8
40	2	3-87631-6	3-87631-5	—

[1]Cavity identification, AMP, part number and date code stamped on housing and/or strain relief where size permits.
[2]No marking on housing or strain relief.

Center Polarized

Material:

Black thermoplastic, flame retardant

No. of Pos.	Part Nos. Unstamped[1]
10	102387-1
14	102387-2
16	102387-3
20	102387-4
24	102387-5
26	102387-6
30	102387-7
34	102387-8
40	102387-9
44	1-102387-3
50	1-102387-0
60	1-102387-1
64	1-102387-2

[1]No marking on housing.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

Short Point Crimp Snap-In Receptacle Contacts

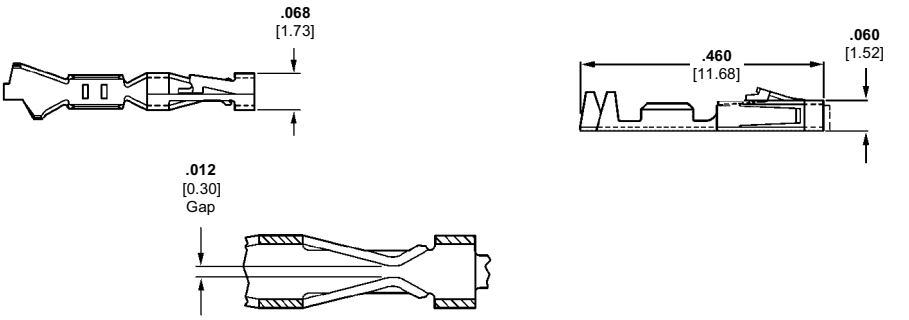
Material and Finish:

Copper alloy C7025, plated as follows:

Plating A—Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

Plating B—Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

Plating C—.000100 [0.00254] min. bright tin-lead over .000050 [0.00127] min. nickel on entire contact



Section

Wire Size Range		Ins. Dia. Range	Finish	Contact Part No. (Standard Pressure)	
AWG	[mm2]			Strip Form	Loose Piece
32-28	0.03-0.08	**.025-.060** 0.64-1.52	Plating A	104481-4	104481-8
			Plating B	104481-3	—
26-22	0.13-0.3	**.025-.060** 0.64-1.52	Plating A	104480-4	104480-9
			Plating B	104480-3	104480-8
			Plating C	104480-2	104480-7
24-20	0.2-0.5	**.025-.060** 0.64-1.52	Plating A	104479-4	104479-7
			Plating B	104479-3	104479-6
			Plating C	104479-2	104479-5

MTE Receptacle Assemblies—Strip Form Plain, Single-Row, .100 [2.54] Centers

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the AMP Manual Pistol Grip Tool.

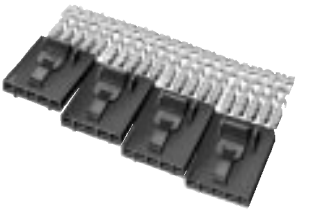
No. of Pos.	Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm2] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	
2	10	—	103975-1	103974-1	103688-1
3	8	—	—	103974-2	—
4	5	—	—	103974-3	103688-3
5	4	103976-4	103975-4	103974-4	—
6	4	—	103975-5	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

MTE Receptacle Assemblies—Strip Form Polarized/Latching, Single-Row, .100 [2.54] Centers



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the AMP Manual Pistol Grip Tool.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

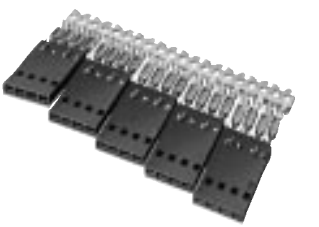
Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

No. of Pos. Segment	Quantities Per Strip	Housing Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm2] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm2] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	10	103961-1	103960-1	103959-1	103958-1	103957-1	103956-1	104257-1
3	8	103961-2	103960-2	—	103958-2	103957-2	103956-2	104257-2
4	5	103961-3	103960-3	103959-3	103958-3	103957-3	103956-3	104257-3
5	4	103961-4	103960-4	103959-4	103958-4	103957-4	103956-4	104257-4
6	4	—	103960-5	103959-5	103958-5	103957-5	—	104257-5
7	2	—	103960-6	—	103958-6	103957-6	—	104257-6
8	2	—	—	103959-7	103958-7	103957-7	—	104257-7
9	2	—	—	—	—	103957-8	—	104257-8
10	2	103961-9	—	—	103958-9	103957-9	103956-9	104257-9
11	2	—	—	—	—	—	—	1-104257-0
12	2	—	—	—	1-103958-1	—	—	1-104257-1

MTE Receptacle Assemblies—Strip Form with Guide Ribs, Single-Row, .100 [2.54] Centers



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the AMP Manual Pistol Grip Tool.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated as follows:

Plating—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

No. of Pos.	Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm2] Wire	Unloaded Housings
2	10	103969-1	103648-1
3	8	—	103648-2
4	5	103969-3	103648-3
5	4	103969-4	103648-4
8	2	—	103648-7
10	2	—	103648-9

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

MTE High Pressure Receptacle Assemblies—Strip Form Plain, Single-Row, .100 [2.54] Centers

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

No. of Pos.	Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm2] Wire
2	10	104439-1
3	5	104439-2
4	5	104439-3
5	4	104439-4
7	2	104439-6

Preassembled housings in strip form are available in positions 2 thru 10. For ease of handling, positions 2 thru 5 are recommended when using the AMP Manual Pistol Grip Tool.

MTEPin Assemblies, Shrouded—Strip Form Polarized/Latching, Single-Row, .100 [2.54] Centers

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

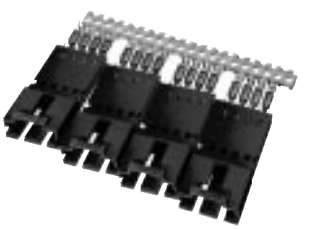
Contacts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C—.000100 [0.00254] bright tin-lead over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.



Preassembled housings in strip form are available in positions 2 thru 11. For ease of handling, positions 2 thru 5 are recommended when using the AMP Manual Pistol Grip Tool.

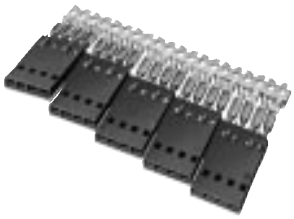
No. of Pos.	Housing Quantities Per Strip Segment	Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm2] Wire		Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm2] Wire			Unloaded Housings
		Plating A	Plating B	Plating A	Plating B	Plating C	
2	8	103949-1	103948-1	103946-1	103945-1	103944-1	103653-1
3	5	—	103948-2	103946-2	103945-2	103944-2	103653-2
4	4	—	103948-3	103946-3	103945-3	103944-3	103653-3
5	4	—	103948-4	103946-4	103945-4	103944-4	103653-4
6	2	—	—	—	103945-5	—	103653-5
7	3	—	—	—	—	—	103653-6
8	2	—	—	—	—	103944-7	103653-7
9	2	—	—	—	—	—	103653-8
10	2	—	—	—	103945-9	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

MTE Pin Assemblies—Strip Form with Guide Ribs, Single-Row, .100 [2.54] Centers



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the AMP Manual Pistol Grip Tool.

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

No. of Pos.	Housing Quantities Per Strip Segment	Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm2] Wire	Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm2] Wire	Unloaded Housings
2	10	—	103951-1	—
3	5	—	103951-2	104503-2
4	5	103954-3	103951-3	—

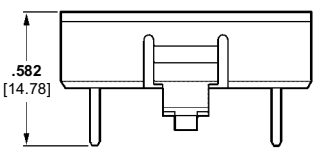
MTE Coupling Shrouds for Receptacle Assemblies with Guide Ribs

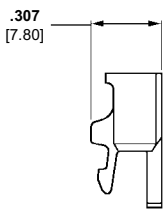
Single-Row

Material:

Black thermoplastic, 94V-0 rated

No. of Pos.	Single-Row Coupling Shroud
4	103680-1



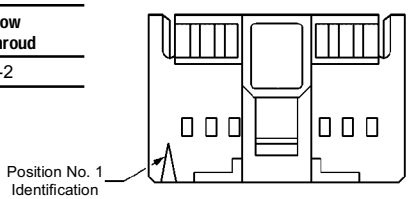


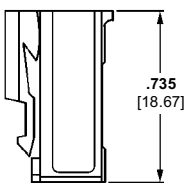
Double-Row

Material:

Black thermoplastic, 94V-0 rated

No. of Pos.	Double-Row Coupling Shroud
20	104500-2





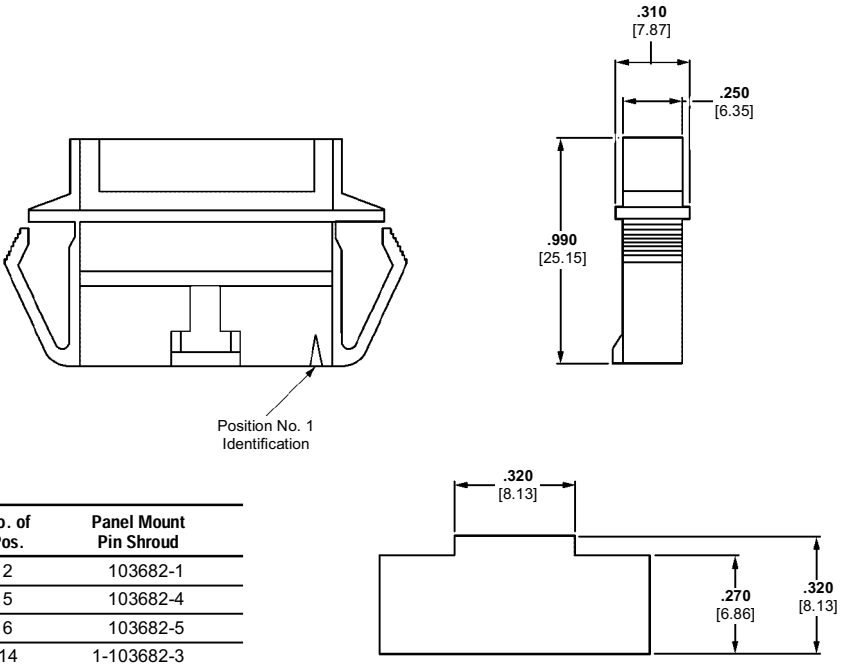
AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

MTEPanel Mount Pin Shrouds for Pin Assemblies with Guide Ribs, Single-Row

Material:

Black thermoplastic, 94V-0 rated



No. of Pos.	Panel Mount Pin Shroud
2	103682-1
5	103682-4
6	103682-5
14	1-103682-3

MTE Headers, Shrouded Polarized/Latching, Single-Row .100 [2.54] Centers

.025 [0.64] Square Straight Post (With or Without Holddown)

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100 [0.00254] tin-lead over .000050 [0.00127] nickel on entire post

No. of Pos.	Polarized/Latching Header With Holddown			Polarized/Latching Header Without Holddown		
	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	103908-1	103670-1	103669-1	103735-1	103638-1	103639-1
3	103908-2	103670-2	103669-2	103735-2	103638-2	103639-2
4	103908-3	103670-3	103669-3	103735-3	103638-3	103639-3
5	103908-4	103670-4	103669-4	103735-4	103638-4	103639-4
6	103908-5	103670-5	103669-5	103735-5	103638-5	103639-5
7	103908-6	103670-6	103669-6	103735-6	103638-6	103639-6
8	103908-7	103670-7	103669-7	103735-7	103638-7	103639-7
9	—	103670-8	103669-8	—	103638-8	103639-8
10	103908-9	103670-9	103669-9	103735-9	103638-9	103639-9
11	—	1-103670-0	—	1-103735-0	—	—
12	1-103908-1	1-103670-1	—	1-103735-1	1-103638-1	1-103639-1
13	—	—	—	—	1-103638-2	—
14	1-103908-3	1-103670-3	—	1-103735-3	—	—
15	—	1-103670-4	—	—	1-103638-4	—
16	—	1-103670-5	—	—	1-103638-5	—
18	—	1-103670-7	—	—	—	—
20	1-103908-9	1-103670-9	—	—	1-103638-9	1-103639-9
24	—	2-103670-3	—	—	—	—
25	—	2-103670-4	—	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Printed Circuit Board Connectors (Continued)

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centers

.025 [0.64] Square Right-Angle Post

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts—Copper alloy, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin-lead on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C—.000100 [0.00254] tin-lead over .000050 [0.00127] nickel on entire post

No. of Pos.	Latching Header With Holddown			Latching Header Without Holddown		
	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	103904-1	103673-1	103672-1	103906-1	103635-1	103634-1
3	103904-2	103673-2	103672-2	103906-2	103635-2	103634-2
4	103904-3	103673-3	103672-3	103906-3	103635-3	103634-3
5	103904-4	103673-4	103672-4	103906-4	103635-4	103634-4
6	103904-5	103673-5	103672-5	103906-5	103635-5	103634-5
7	—	103673-6	—	103906-6	103635-6	103634-6
8	103904-7	103673-7	103672-7	103906-7	103635-7	103634-7
9	—	103673-8	—	103906-8	103635-8	103634-8
10	103904-9	103673-9	103672-9	103906-9	103635-9	103634-9
11	—	1-103673-0	—	—	—	—
12	1-103904-1	1-103673-1	—	1-103906-1	1-103635-1	—
14	—	1-103673-3	—	—	1-103635-3	—
15	—	1-103673-4	—	—	—	—
16	—	—	—	—	—	1-103634-5
18	—	1-103673-7	—	—	—	—
20	—	1-103673-9	—	—	—	—
25	—	2-103673-4	—	—	—	—

MTE Headers, Shrouded Latching and High-Temp, Shrouded Polarized/Latching, Single-Row .100 [2.54] Centers

.025 [0.64] Square Straight Post (With Retention Tails and PC Board Orientation)

No. of Pos.	Post Style	Latching Header	Polarized/Latching Header, High-Temp
2	A	104450-1	—
	B	—	104809-1
3	A	104450-2	—
4	A	104450-3	—
5	A	104450-4	—

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Posts A—Copper alloy, plated .000100-.000200 [0.00254-0.00508] tin-lead over .000050 [0.00127] nickel on entire post

Posts B—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin-lead on solder tail, with entire post underplated .000050 [0.00127] nickel

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

MTE Headers, Shrouded High-Temp, Polarized/Latching (Thru-Hole, SMT Compatible) Single-Row, .100 [2.54] Centers

.025 [0.64] Square Straight Post (With or Without Holddown)

No. of Pos.	Straight Header	
	With Holddown	Without Holddown
2	104362-1	—
3	104362-2	104363-2
4	104362-3	—
5	104362-4	104363-4
6	104362-5	104363-5
8	104362-7	104363-7
10	—	104363-9

Material and Finish:

Housing—Black thermoplastic, high temperature, 94V-0 rated

Posts—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin-lead on solder tail, with entire post underplated .000050 [0.00127] nickel

.025 [0.64] Square Right-Angle Post (With Holddown)

No. of Pos.	Right-Angle Header With Holddown
2	104361-1
3	104361-2
4	104361-3
5	104361-4
6	104361-5
10	104361-9

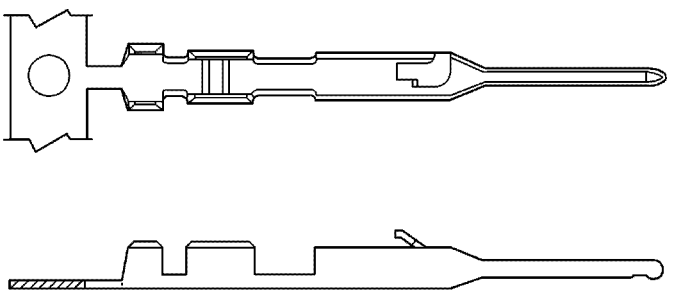
Material and Finish:

Housing—Black thermoplastic, high temperature, 94V-0 rated

Posts—Copper alloy, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin-lead on solder tail, with entire post underplated .000050 [0.00127] nickel

Interchangeable Contacts Wire Crimp (Snap-In)

Pins



Material and Finish:

Phosphor bronze, plated as follows:

Plating A—Duplex plated .000030 [0.00076] gold on contact area, .000030 [0.00076] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B—Duplex plated .000015 [0.00038] gold on contact area, .000030 [0.00076] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C—.000100 [0.00254] min. bright tin-lead over .000050 [0.00127] nickel on entire contact

Wire Size Range		Ins. Dia. Range	Finish	Contact Part No. (Standard Pressure)	
AWG	[mm2]			Strip Form	Loose Piece
32-28	0.03-0.08	**.025-.054** 0.64-1.37	Plating A	—	104506-7
			Plating B	—	104506-5
26-22	0.14-0.32	**.036-.054** 0.91-1.37	Plating A	104505-6	104505-7
			Plating B	104505-4	104505-5
			Plating C	—	104505-3

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

MT Receptacle Assemblies, Double-Row .100 x .100 [2.54 x 2.54] Centers

Housings Preloaded with Standard Pressure Contacts

Material and Finish:

Housing—Black thermoplastic, flame retardant

Contacts—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

No. of Pos.	Part Nos. (Stamped) Wire Size Range 30-26 AWG [0.05-0.15 mm2]	26-22 AWG [0.12-0.3 mm2]	22-20 AWG [0.3-0.6 mm2]	Unloaded Housings
6	—	102398-1	—	—
8	—	102398-2	—	—
10	102393-3	102398-3	—	—
12	—	102398-4	—	—
14	102393-5	102398-5	—	—
16	102393-6	102398-6	102448-6	102394-6
18	—	102398-7	102448-7	102394-7
20	102393-8	102398-8	102448-8	102394-8
24	1-102393-0	1-102398-0	—	—
26	1-102393-1	1-102398-1	1-102448-1	—
34	—	1-102398-5	—	1-102394-5
40	1-102393-8	1-102398-8	1-102448-8	—
50	2-102393-3	2-102398-3	2-102448-3	—

MT Receptacle Assemblies, Double-Row .100 x .100 [2.54 x 2.54] Centers

Housings Preloaded with High Pressure Contacts

Material and Finish:

Housing—Black thermoplastic, flame retardant

Contacts—Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

No. of Pos.	Part Nos. (Stamped[1]) Wire Size Range 30-26 AWG [0.05-0.15 mm2]	26-22 AWG [0.12-0.3 mm2]
6	102693-1	—
10	—	102694-3
12	—	102694-4
16	—	102694-6

[1]Cavity identification — first cavity (one side); AMP Part No. and date code stamped on housing where size permits.

MT Low Profile and Standard Profile Covers for Double-Row Receptacle Assemblies

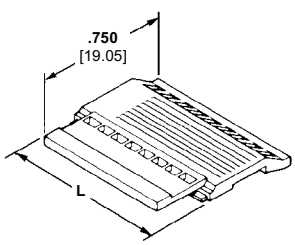
Material:

Black thermoplastic, flame retardant

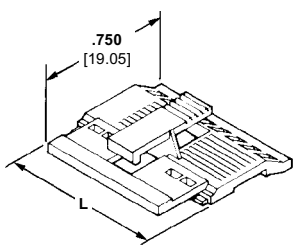
Note: See page 100 for part numbers.

Low Profile Front Covers

A - Polarizing Cover
(Mates with AMPMODU 4-sided shrouded headers. Refer to pages 82, 83 & 84.)



B - Latching Cover
(Mates with AMPMODU 4-sided shrouded headers with extraction slot. Refer to pages 82, 83 & 84.)



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

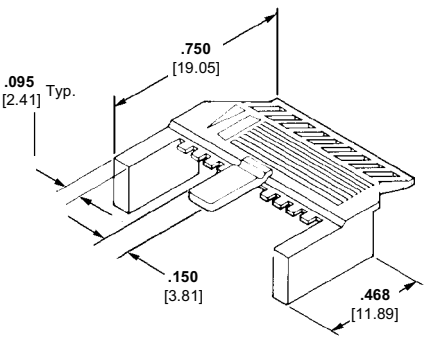
AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

MT Low Profile and Standard Profile Covers for Double-Row Receptacle Assemblies

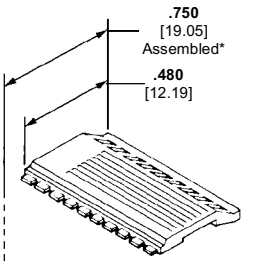
Printed Circuit Board Connectors (Continued)

Low Profile Front Covers (Continued)

C - Ejection Cover
(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see AMP Catalog 82012.



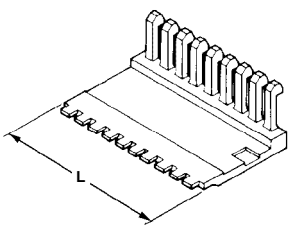
D - Non-Polarizing Cover
(Designed for use with shielded connectors or for non-polarizing applications.)



*Dimension applies to cover when installed on connector housing.

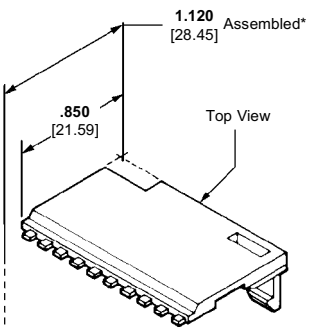
Low Profile Back Covers

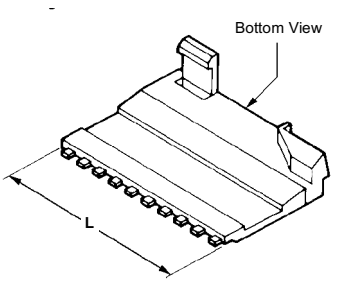
E - For Shielding and Non-Shielding Applications
(For use with any low profile cover.)



Standard Profile Front Covers

G - Hermaphroditic Cover
(Two hermaphroditic covers can be used or one hermaphroditic cover can be used with an Ejection Cover.)





No. of Pos.	Low Profile Covers					Standard Profile Covers
	Front Covers				Back Covers	
	A Polarizing	B Latching	C Ejection	D Non-Polarizing	E Shielding and Non-Shielding Applications	G Hermaphroditic
6	102540-1	—	—	102541-1	102536-1	—
8	102540-2	—	—	—	102536-2	—
10	102540-3	—	102537-3	102541-3	102536-3	—
12	102540-4	102681-1	—	—	102536-4	—
14	—	102681-2	102537-5	—	102536-5	—
16	—	102681-3	102537-6	—	102536-6	102396-6
18	—	102681-4	—	102541-7	102536-7	—
20	—	102681-5	102537-8	102541-8	102536-8	—
24	—	102681-7	—	—	1-102536-0	—
26	—	102681-8	1-102537-1	—	1-102536-1	—
34	—	1-102681-2	—	—	1-102536-5	—
40	—	—	1-102537-8	1-102541-8	1-102536-8	—
50	—	2-102681-0	2-102537-3	—	2-102536-3	—

Printed Circuit Board Connectors (Continued)

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

MT Shielded Headers for use with Shielded Receptacle Assemblies

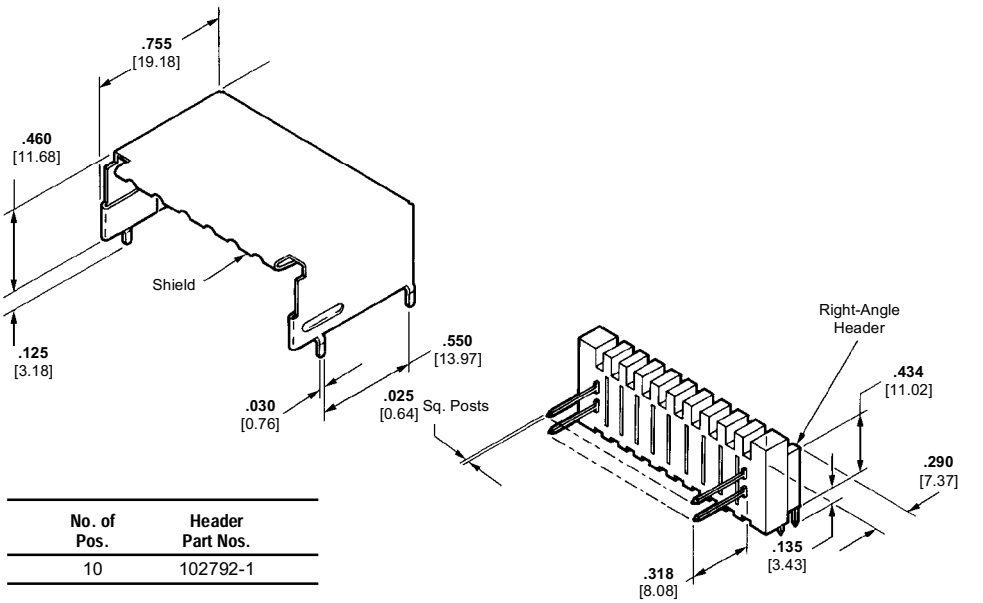
AMPMODU Right-Angle Headers PC Board Mounted

Material and Finish:

Housing—Black thermoplastic, flame retardant

Posts—Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Shield—Copper alloy, .020 [0.51] thick; pretinned .000030 [0.00076] min.



No. of Pos.	Header Part Nos.
10	102792-1

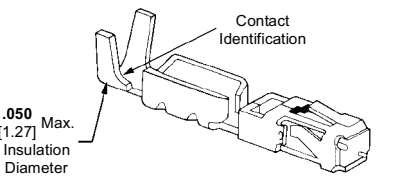
MT Replacement Receptacle Contacts

Insulation Displacement Contacts

Material and Finish:

Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

Wire Size Range		Standard Pessure Receptacle	
AWG	[mm2]	Contact Ident.	Part No.
22-20	0.3-0.6	3	102449-3



Level V IDC Connectors

Receptacle Assemblies, Double-Row, .125 x .125 [3.18 x 3.18] Centers

Housings Preloaded with Insulation Displacement Crimp Receptacle Contacts

Material and Finish:

Housing—Black thermoplastic, flame retardant

Contacts—Copper alloy, duplex plated .000050 [0.00127] gold on contact area, .000100 [0.00254] min. bright tin-lead in crimp area, with entire contact underplated .000050 [0.00127] nickel

No. of Pos.	Receptacle Assembly (Stamped[1]) for 26-22 AWG [0.12-0.3 mm2] Wire
8	102935-4
10	102935-6
16	1-102935-2
20	1-102935-6
24	1-102935-9
32	2-102935-8
40	3-102935-6

[1]White ink stamped, one side—8- thru 12-position with AMP and arrow; 14- and 16-position with AMP, part no., and arrow; 18- thru 40-position with AMP, part no., date code and arrow.

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

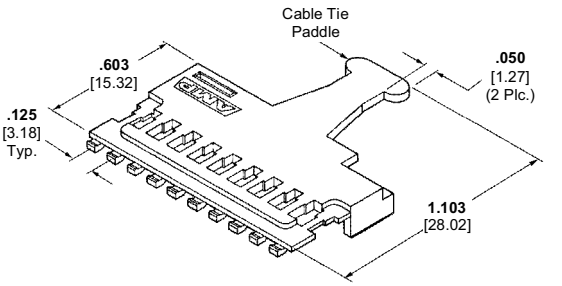
Level V IDC Connectors

Hermaphroditic Covers for Level V IDC Receptacle Assemblies, Double-Row, .125 x .125 [3.18 x 3.18] Centers

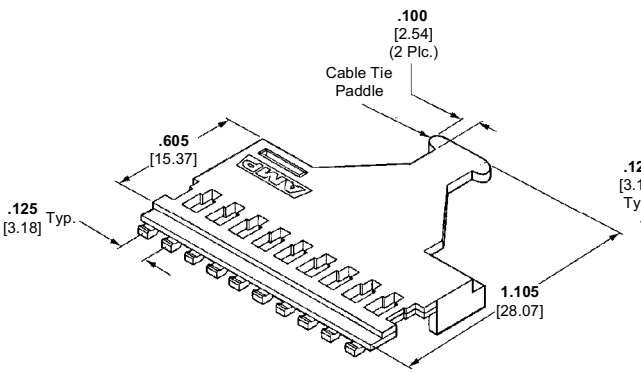
Material:

Black thermoplastic, flame retardant, 94V-0 rated

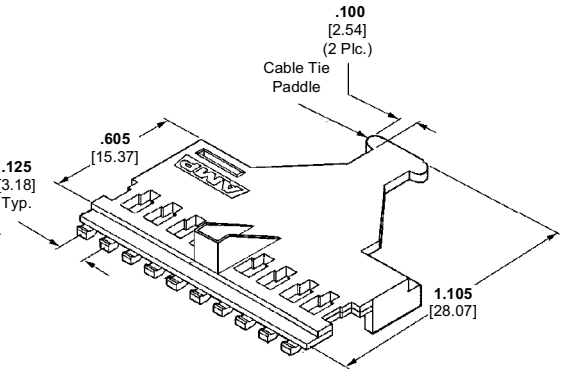
Printed Circuit Board Connectors (Continued)



Cover 103058 Series with Cable Tie Paddle



Cover 103349 Series with Wide Cable Tie Paddle



Cover 103350 Series with Wide Cable Tie Paddle and Polarization

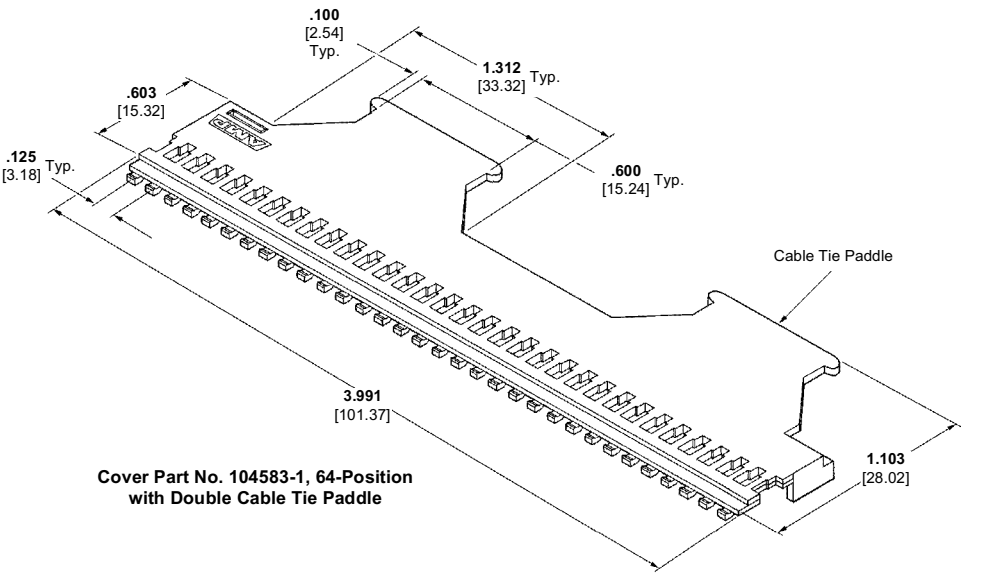
No. of Pos. (Housing Size)	Cover Part Nos.		
	With Cable Tie Paddle	With Wide Cable Tie Paddle	With Wide Cable Tie Paddle and Polarization
8	—	103349-4	103350-4
10	103058-3	—	—
16	—	103349-1	—
20	—	103349-5	103350-5
32	—	103349-2	103350-2
40	—	103349-3	103350-3

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

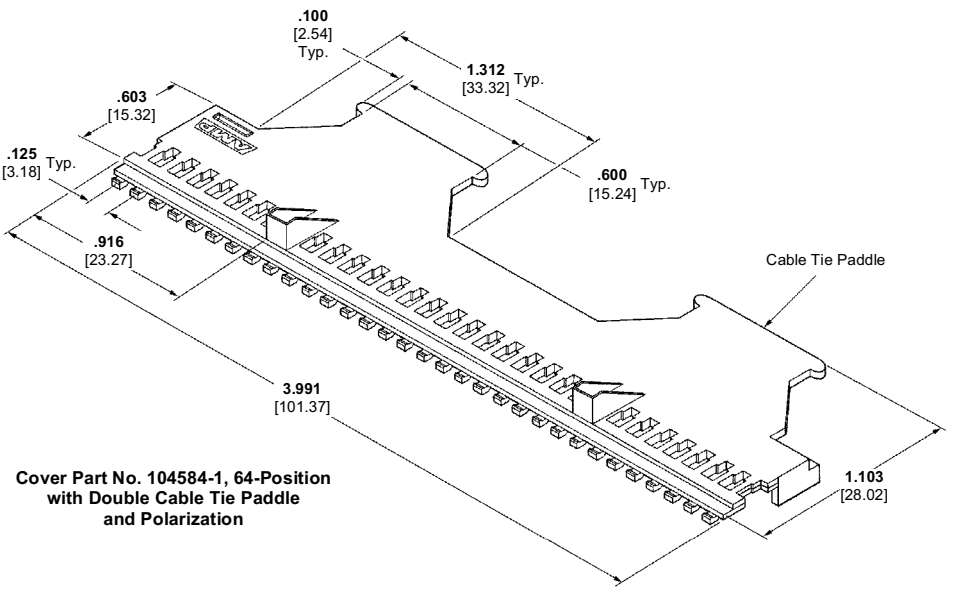
Level V IDC Connectors

Hermaphroditic Covers for Level V IDC Receptacle Assemblies, Double-Row, .125 x .125 [3.18 x 3.18] Centers

Printed Circuit Board Connectors (Continued)



Cover Part No. 104583-1, 64-Position with Double Cable Tie Paddle



Cover Part No. 104584-1, 64-Position with Double Cable Tie Paddle and Polarization

AMPMODU .025 [0.64] Square Interconnection System (Wire-to-Board)

Printed Circuit Board Connectors (Continued)

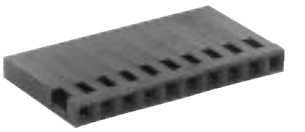
Mini-Tandem Spring Receptacles

Mini-Tandem Spring Receptacle Housings, Single-Row

.100 [2.54] Centers

Material—Black glass-filled polyester, 94V-0 rated

No. of Pos.	Housing Part No.
2	530554-1
3	530554-2
4	530554-3
16	1-530554-5



Mini-Tandem Spring Receptacle Housings, Double-Row

.100 x .100 [2.54 x .254] Centers

Material—Black glass-filled polyester, 94V-0 rated

No. of Pos.	Housing Part No.
6	530902-1

Mini-Tandem Spring Contacts

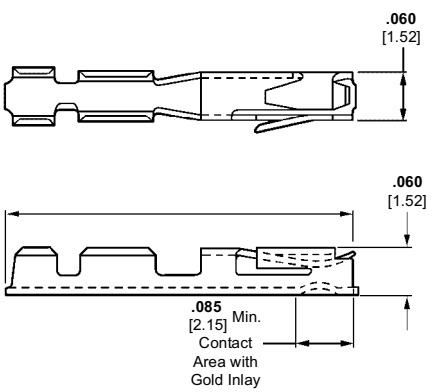
Receptacle Contacts

Material and Finish:

Phosphor bronze, plated as follows:

Plating A—Duplex plated .000015 [0.00038] gold inlay on contact area, tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B—.000100 [0.00254] min. bright tin over .000030 [0.00076] nickel on entire contact



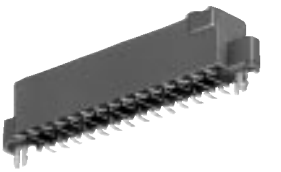
Wire Size Range AWG	Wire Size Range [mm2]	Ins. Dia. Range	Finish	Contact Part No. Standard Pressure Strip Form	Standard Pressure Loose Piece	High Pressure Strip Form	High Pressure Loose Piece
32-28	0.03-0.08	**.025-.054** 0.64-1.37	Plating A	—	530901-3	—	—
26-22	0.14-0.32	**.036-.054** 0.91-1.37	Plating A	—	530553-5	531224-6	531224-7
			Plating B	530553-6	530553-7	531224-2	—

AMPMODU 50/50 Grid Connector System (.050 x .050 [1.27 x 1,27] Centers), Board-to-Board

Printed Circuit Board Connectors (Continued)

Double Row Vertical Receptacles With Standard Holddowns

No. of Positions	Part Numbers
10	104652-1
20	104652-2
30	104652-3
40	104652-4
50	104652-5
60	104652-6
70	104652-7
80	104652-8
100	1-104652-0



Material and Finish:

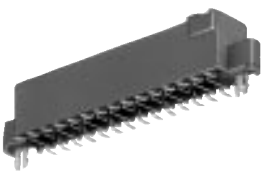
Housing—Glass-filled thermoplastic, black, 94V-0 rated

Contacts—Beryllium copper; duplex plated 0.00076 [.000030] gold in mating area, 0.00381 [.000150] tin-lead on solder tail, with entire contact underplated 0.00127 [.000050] nickel

Holddowns—Copper alloy; plated 0.00381 [.000150] tin-lead over 0.00127 [.000050] nickel

Double Row Receptacles With Asymmetrical Holddowns for Polarization to PC Board

No. of Positions	Part Numbers
60	104786-6



Material and Finish:

Housing—Glass-filled thermoplastic, black, 94V-0 rated

Contacts—Beryllium copper; duplex plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin-lead on solder tail, with entire contact underplated .000050 [0.00127] nickel

Holddown—Copper alloy; plated .000150 [0.00381] tin-lead over .000050 [0.00127] nickel

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU 50/50 Grid Connector System (.050 x .050 [1.27 x 1,27] Centers), Board-to-Board

Printed Circuit Board Connectors (Continued)

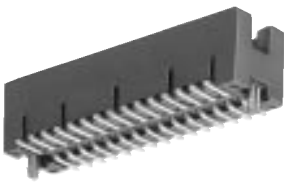
Double Row Vertical Headers With Standard Holddowns

Material and Finish:

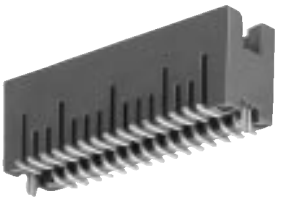
Housing—Glass-filled thermoplastic, black, 94V-0 rated

Contacts—Phosphor bronze; duplex plated 0.00076mm [.000030 in.] gold in mating area, 0.00381mm [.000150 in.] tin-lead on solder tail, with entire contact underplated 0.00127mm [.000050 in.] nickel

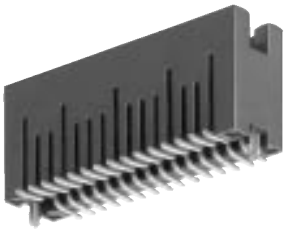
Holddowns—Copper alloy; plated 0.00381mm [.000150 in.] tin-lead over 0.00127mm [.000050 in.] nickel



For 6.35mm [.250 in.] Stacking Height



For 8.13mm [.320 in.] Stacking Height



For 9.91mm [.390 in.] Stacking Height

No. of Positions	Header Part Numbers		
	6.35mm [.250 in.] Stacking Height	8.13mm [.320 in.] Stacking Height	9.91mm [.390 in.] Stacking Height
10	—	104656-1	—
20	104655-3	104656-2	104693-2
30	104655-4	104656-3	104693-3
40	104655-5	104656-4	104693-4
50	104655-6	104656-5	104693-5
60	104655-7	—	104693-6
70	104655-8	104656-7	104693-7
80	104655-9	104656-8	104693-8
100	1-104655-1	1-104656-0	1-104693-0

For Complete Product Information, Order Catalog 889092

Double Row Right-Angle Headers — Non-Latching

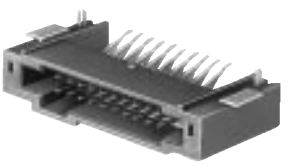
Material and Finish:

Housing — Liquid crystal polymer, black, 94V-0 rated

Contacts — Brass; duplex plated .000030 [0.00076] gold in mating area, .000150 [0.000381] tin-lead on solder tail, with entire contact underplated .000050 [0.00127] nickel

Holddown — Copper alloy; plated .0000150 [0.00381] tin-lead over .000050 [0.00127] nickel

No of Pos.	Header Part Numbers
80	104894-8
100	1-104894-0



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information, Order Catalog 82643

AMPMODU 50/50 Grid Connector System (.050 x .050 [1.27 x 1,27] Centers), Cable-to-Board

Printed Circuit Board Connectors (Continued)

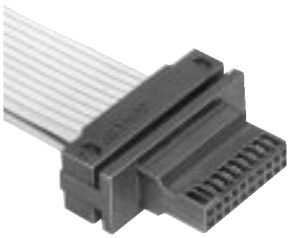
Double Row Receptacles Connectors without Latch

Material and Finish:

Housing —Glass-filled thermoplastic, black, 94V-0 rated

Contacts — Phosphor bronze; duplex plated .000030 [0.00076] minimum gold in mating area, .000050 [0.00127] minimum bright tin-lead in termination area, with entire contact underplated .000050 [0.00127] minimum nickel

No of Pos.	Receptacle Part Numbers
10	104893-1
20	104893-2



Double Row Receptacles with Latch

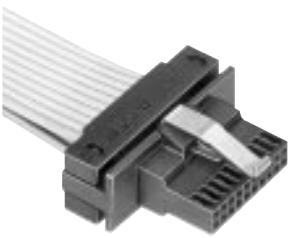
Material and Finish:

Housing — Thermoplastic, black, 94V-0 rated

Latch — Stainless steel

Contacts — Phosphor bronze; duplex plated .000030 [0.00076] minimum gold in mating area, .000050 [0.00127] minimum bright tin-lead in termination area, with entire contact underplated .000050 [0.00127] minimum nickel

No of Pos.	Receptacle Part Numbers
80	104892-8

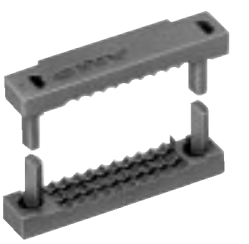


Terminating Covers for Cable Connectors

Material:

Glass-filled thermoplastic, black, 94V-0 rated

No of Pos.	Terminator Cover Part Numbers
10	104891-1
20	104891-2
50	104891-5
80	104891-8



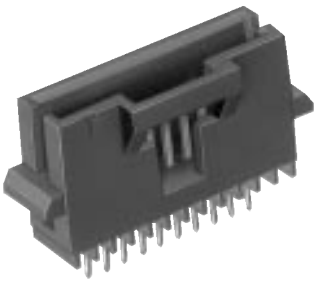
AMPMODU System 50 Connectors (.050 x .100 [1.27 x 2.54] Centers), Board-to-Board

Printed Circuit Board Connectors (Continued)

Thru-Hole Headers—Shrouded, .050 [1.27] Centers

Single Row, Vertical

No of Pos.	Receptacle Part Numbers
12	1-104071-1



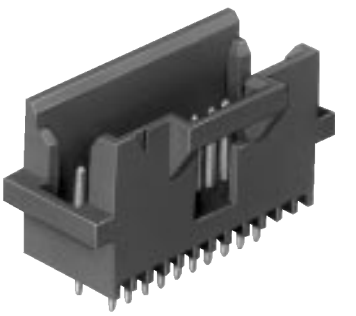
Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin-lead on solder posts, with entire contact underplated .00050 [0.00127] nickel.

Double Row, Vertical

No of Pos.	Receptacle Part Numbers
50	104666-4



Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin-lead on solder posts, with entire contact underplated .00050 [0.00127] nickel.

Double Row, Vertical With Card Slots

No of Pos.	Receptacle Part Numbers
100	104076-8

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000030 [0.00076] gold in mating area, .000150 [0.00381] tin-lead on solder posts, with entire contact underplated .00050 [0.00127] nickel.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU System 50 Connectors (.050 x .100 [1.27 x 2.54] Centers), Board-to-Board

Printed Circuit Board Connectors (Continued)

Thru-Hole Receptacles, .050 [1.27] Centers

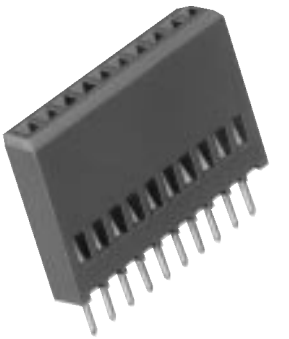
Single Row, Vertical

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000030 [0.00076] gold in mating ara, .000150 [0.00381] tin-lead on solder posts, with entire contact underplated .00050 [0.00127] nickel.

No of Pos.	Part Numbers
10	104192-2



Double Row, Right-Angle

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000030 [0.00076] gold in mating ara, .000150 [0.00381] tin-lead on solder posts, with entire contact underplated .00050 [0.00127] nickel.

No of Pos.	Part Numbers
10	103911-1
20	103911-2
30	103911-7
50	103911-4
100	103911-8

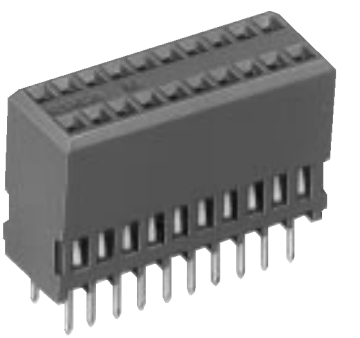
Double Row, Vertical

Material and Finish:

Housing—Black thermoplastic, 94V-0 rated

Contacts—Copper alloy, plated .000030 [0.00076] gold in mating ara, .000150 [0.00381] tin-lead on solder posts, with entire contact underplated .00050 [0.00127] nickel.

No of Pos.	Part Numbers	
	Post Length	
	.100 [2.54]	.145 [3.68]
20	104078-1	—
24	104078-9	—
30	104078-9	104744-2
40	104078-2	—
60	104078-6	—
80	104078-9	104744-4
100	104078-8	—



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMPMODU System 50 Connectors (.050 x .100 [1.27 x 2.54] Centers), Board-to-Board

Printed Circuit Board Connectors (Continued)

Vertical Headers

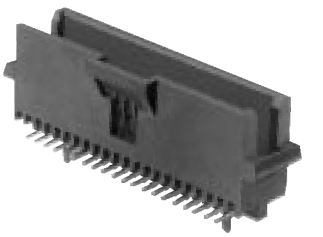
Material and Finish:

Housing—Glass-filled, black thermoplastic, 94V-0 rated

Contacts—Phosphor bronze, plated 0.00076 [.000030] gold in mating area, 0.00381 [.000150] tin-lead on solder tail, with entire contact underplated 0.00127 [.000050] nickel

Holddown—Copper alloy, plated 0.00381 [.000150] tin-lead over 0.00127 [.000050] nickel

No. of Positions	Header Part Numbers
20	104549-2
24	104549-3
30	104549-5
40	104549-6
50	104549-7
60	104549-8
80	104549-9
100	1-104549-0



Vertical Receptacles

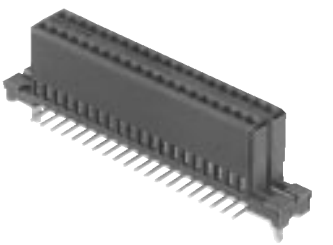
Material and Finish:

Housing—Glass-filled, black thermpolastic, 94V-0 rated

Contacts—Phosphor bronze, plated 0.00076 [.000030] gold in mating area, 0.00381 [.000150] tin-lead on solder tail, with entire contact underplated 0.00127 [.000050] nickel

Holddown—Copper alloy, plated 0.00381 [.000150] tin-lead over 0.00127 [.000050] nickel

No. of Positions	Receptacle Part Numbers
50	104550-6
60	104550-7
80	104550-8



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-100 IDC Connectors—Closed End and Feed-Thru

Material and Finish:

Housing—UL94V-2 rated, type 6/6 nylon, see below for color; or UL94V-0 rated, nylon, black

Contacts—Phosphor bronze, post plated .000030 [0.00076] or .000015 [0.00038] post gold-plated over nickel

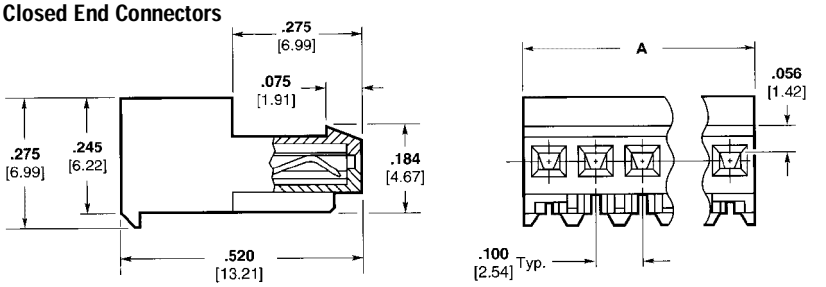
UL94V-2 Color Coding by Wire Size:

28 AWG—Green
26 AWG—Blue
24 AWG—White
22 AWG—Red

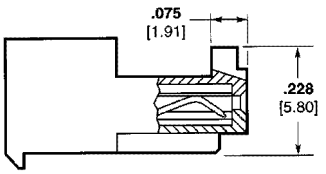
UL94V-0—Black

Printed Circuit Board Connectors (Continued)

Closed End Connectors

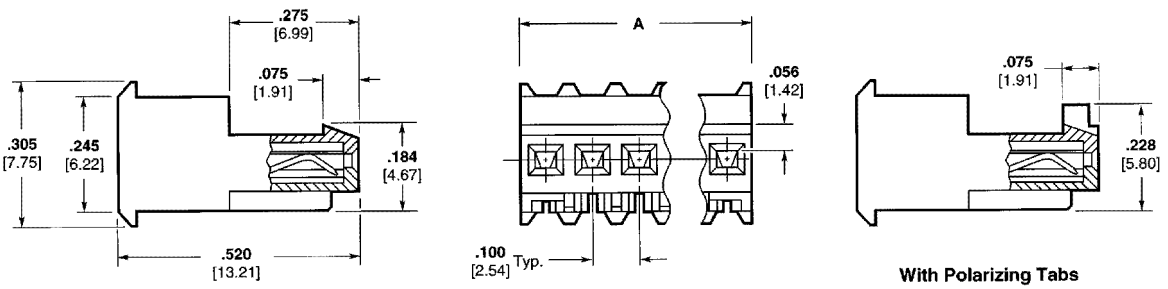


Without PolarizingTabs



With Polarizing Tabs

Feed-Thru Connectors



Without PolarizingTabs

With Polarizing Tabs

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End		Feed-Thru	
			Without Tabs	With Tabs	Without Tabs	With Tabs
			Part Nos.	Part Nos.	Part Nos.	Part Nos.
Standard UL94V-2, Tin Plated						
22 AWG [0.3-0.4 mm²]	2	**.200** [5.08]	640440-2	643813-2	640620-2	644540-2
	3	**.300** [7.62]	640440-3	643813-3	640620-3	—
	4	**.400** [10.16]	640440-4	643813-4	640620-4	644540-4
	5	**.500** [12.7]	640440-5	643813-5	640620-5	644540-5
	6	**.600** [15.24]	640440-6	643813-6	640620-6	—
	7	**.700** [17.78]	640440-7	643813-7	640620-7	—
	8	**.800** [20.32]	640440-8	643813-8	640620-8	—
	9	**.900** [22.86]	640440-9	643813-9	—	—
	10	**1.00** [25.4]	—	1-643813-0	1-640620-0	—
	11	**1.100** [27.94]	—	1-643813-1	—	—
	12	**1.200** [30.48]	—	1-643813-2	—	—
	13	**1.300** [33.02]	—	1-643813-3	—	—
	14	**14.00** [35.56]	—	1-643813-4	1-640620-4	—
	20	**2.000** [50.8]	2-640440-0	2-643813-0	2-640620-0	2-644540-0
	24	**2.400** [60.96]	2-640440-4	2-643813-4	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Printed Circuit Board Connectors (Continued)

MTA-100 IDC Connectors—Closed End and Feed-Thru (continued)

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End		Feed-Thru	
			Without Tabs Part Nos.	With Tabs Part Nos.	Without Tabs Part Nos.	With Tabs Part Nos.
Standard UL94V-2, Tin Plated						
24 AWG [0.2 mm²]	2	**.200** [5.08]	640441-2	643814-2	640621-2	—
	3	**.300** [7.62]	640441-3	643814-3	640621-3	644563-3
	4	**.400** [10.16]	640441-4	643814-4	—	—
	5	**.500** [12.7]	640441-5	643814-5	—	644563-5
	6	**.600** [15.24]	640441-6	643814-6	640621-6	644563-6
	7	**.700** [17.78]	640441-7	643814-7	640621-7	—
	8	**.800** [20.32]	640441-8	643814-8	640621-8	644563-8
	9	**.900** [22.86]	640441-9	643814-9	—	—
	10	**1.00** [25.4]	1-640441-0	1-643814-0	—	—
	11	**1.100** [27.94]	1-640441-1	1-643814-1	—	—
	12	**1.200** [30.48]	1-640441-2	1-643814-2	—	—
	13	**1.300** [33.02]	1-640441-3	—	—	—
	14	**14.00** [35.56]	1-640441-4	—	—	—
	15	**15.00** [38.1]	1-640441-5	—	—	—
	16	**16.00** [40.64]	1-640441-6	1-643814-6	—	—
	20	**2.000** [50.8]	2-640441-0	—	—	—
	24	**2.400** [60.96]	2-640441-4	—	—	—
26 AWG [0.12-0.15 mm²]	2	**.200** [5.08]	640442-2	643815-2	—	—
	3	**.300** [7.62]	640442-3	643815-3	—	—
	4	**.400** [10.16]	640442-4	643815-4	—	—
	5	**.500** [12.7]	640442-5	643815-5	—	—
	6	**.600** [15.24]	640442-6	643815-6	—	—
	7	**.700** [17.78]	640442-7	643815-7	—	—
	8	**.800** [20.32]	640442-8	643815-8	—	—
	9	**.900** [22.86]	640442-9	643815-9	—	—
	10	**1.00** [25.4]	1-640442-0	—	—	—
	11	**1.100** [27.94]	—	1-643815-1	—	—
	12	**1.200** [30.48]	1-640442-2	1-643815-2	—	—
	13	**1.300** [33.02]	1-640442-3	—	—	—
	14	**14.00** [35.56]	1-640442-4	—	—	—
	15	**15.00** [38.1]	1-640442-5	—	—	—
	16	**16.00** [40.64]	1-640442-6	—	—	—
28 AWG [0.08-0.09 mm²]	2	**.200** [5.08]	640443-2	643816-2	—	—
	3	**.300** [7.62]	640443-3	—	—	—
	4	**.400** [10.16]	640443-4	—	—	—
	5	**.500** [12.7]	640443-5	643816-5	—	—
	6	**.600** [15.24]	640443-6	643816-6	—	—
	7	**.700** [17.78]	640443-7	—	—	—
	8	**.800** [20.32]	640443-8	643816-8	—	—
	10	**1.00** [25.4]	1-640443-0	—	—	—
	12	**1.200** [30.48]	1-640443-2	—	—	—
Tape Mounted on Reel UL94V-2, Tin Plated						
22 AWG [0.3-0.4 mm²]	2	**.200** [5.08]	—	644511-2	—	—
	3	**.300** [7.62]	640468-3	644511-3	—	—
	8	**.800** [20.32]	640441-8	644511-8	—	—
24 AWG [0.2 mm²]	3	**.300** [7.62]	640469-3	—	—	—
26 AWG [0.12-0.15 mm²]	2	**.200** [6.08]	640470-2	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Printed Circuit Board Connectors (Continued)

MTA-100 IDC Connectors—Closed End and Feed-Thru (continued)

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End		Feed-Thru	
			Without Tabs Part Nos.	With Tabs Part Nos.	Without Tabs Part Nos.	With Tabs Part Nos.
Standard UL94V-2, .000030 [0.00076] Gold Plated						
22 AWG [0.3-0.4 mm²]	2	**.200** [5.08]	641237-2	644042-2	—	—
	3	**.300** [7.62]	641237-3	644042-3	—	—
	4	**.400** [10.16]	641237-4	644042-4	—	—
	5	**.500** [12.7]	641237-5	644042-5	—	—
	6	**.600** [15.24]	—	644042-6	—	—
	7	**.700** [17.78]	641237-7	—	—	—
	8	**.800** [20.32]	641237-8	644042-8	—	—
	10	**1.00** [25.4]	—	1-644042-0	—	—
	12	**1.200** [30.48]	—	1-644042-2	—	—
24 AWG [0.2 mm²]	2	**.200** [5.08]	641238-2	644020-2	—	—
	3	**.300** [7.62]	641238-3	644020-3	—	—
	4	**.400** [10.16]	641238-4	644020-4	—	—
	5	**.500** [12.7]	641238-5	644020-5	—	—
	6	**.600** [15.24]	641238-6	—	—	—
	7	**.700** [17.78]	641238-7	—	—	—
	8	**.800** [20.32]	641238-8	—	—	—
24 AWG [0.2 mm²]	2	**.200** [5.08]	641239-2	644043-2	—	—
	3	**.300** [7.62]	641239-3	644043-3	—	—
	5	**.500** [12.7]	—	644043-5	—	—
Standard UL94V-2, .000015 [0.00038] Gold Plated						
22 AWG [0.3-0.4 mm²]	2	**.200** [5.08]	641190-2	644038-2	—	—
	3	**.300** [7.62]	641190-3	—	—	—
	4	**.400** [10.16]	641190-4	—	—	—
	5	**.500** [12.7]	641190-5	—	—	—
	6	**.600** [15.24]	641190-6	—	—	—
	7	**.700** [17.78]	641190-7	—	—	—
	8	**.800** [20.32]	641190-8	—	—	—
	10	**1.00** [25.4]	641190-0	—	—	—
	12	**1.200** [30.48]	641190-2	—	—	—
	15	**15.00** [38.1]	641190-5	—	—	—
24 AWG [0.2 mm²]	2	**.200** [5.08]	641191-2	—	—	—
	3	**.300** [7.62]	641191-3	—	—	—
	4	**.400** [10.16]	641191-4	—	—	—
	6	**.600** [15.24]	641191-6	—	—	—
26 AWG [0.12-0.15 mm²]	2	**.200** [5.08]	641192-2	—	—	—
	3	**.300** [7.62]	641192-3	—	—	—
	5	**.500** [12.7]	641192-5	—	—	—
	10	**1.00** [25.4]	1-641192-0	—	—	—
	16	**1.600** [40.64]	1-641192-6	—	—	—
LED, UL94V-2, Tin Plated						
22 AWG [0.3-0.4 mm²]	2	**.200** [5.08]	641534-2	—	—	—
	3	**.300** [7.62]	641534-3	—	—	—
24 AWG [0.2 mm²]	2	**.200** [5.08]	641353-2	—	641654-2	—
26 AWG [0.12-0.15 mm²]	2	**.200** [5.08]	641536-2	—	—	—
	3	**.300** [7.62]	641536-3	—	—	—
Standard UL94V-0, Tin Plated (Gold is available, minimums may apply.)						
22 AWG [0.3-0.4 mm²]	2	**.200** [5.08]	—	644083-2	—	—
	3	**.300** [7.62]	—	644083-3	—	—
	6	**.600** [15.24]	—	644083-6	—	—
	13	**1.300** [33.02]	—	1-644083-3	—	—
24 AWG [0.2 mm²]	2	**.200** [5.08]	—	644312-2	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 IDC Connector Accessories

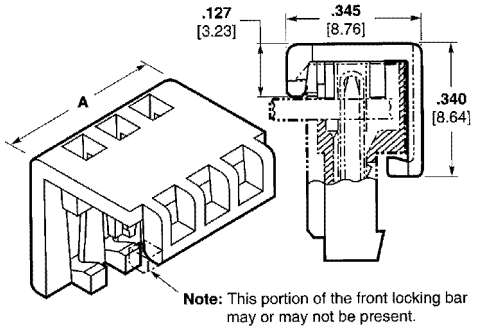
Material:

Strain Relief Cover—UL94V-2 rated, nylon, white

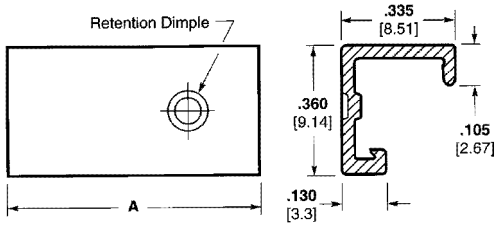
Dust Covers—UL94V-0 rated, polyester, white

Printed Circuit Board Connectors (Continued)

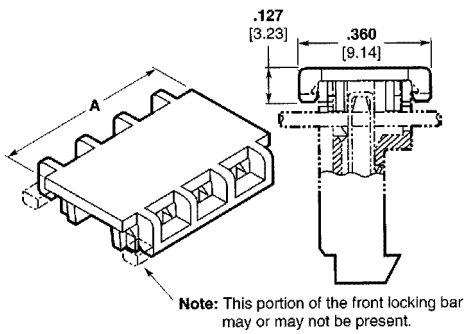
Closed End Strain Relief Covers



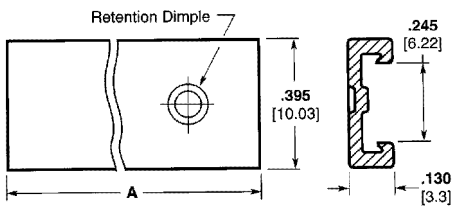
Closed End Dust Covers



Feed-Thru Strain Relief Covers



Feed-Thru Dust Covers



No. of Circuits	Dim. A	Closed End		Feed-Thru	
		Strain Relief Covers	Dust Covers	Strain Relief Covers	Dust Covers
2	**.200** [5.08]	643075-2	1-640550-2	643077-2	—
3	**.300** [7.62]	643075-3	1-640550-3	643077-3	—
4	**.400** [10.16]	643075-4	1-640550-4	643077-4	—
5	**.500** [12.7]	643075-5	1-640550-5	643077-5	—
6	**.600** [15.24]	643075-6	1-640550-6	643077-6	640642-6
7	**.700** [17.78]	643075-7	1-640550-7	643077-7	—
8	**.800** [20.32]	643075-8	1-640550-8	643077-8	640642-8
9	**.900** [22.86]	643075-9	1-640550-9	—	—
10	**1.00** [25.4]	1-643075-0	1-640550-0	1-643077-0	—
11	**1.100** [27.94]	1-643075-1	1-640550-1	—	—
12	**1.200** [30.48]	1-643075-2	1-640550-2	—	—
13	**1.300** [33.02]	1-643075-3	1-640550-3	—	—
14	**1.400** [35.56]	1-643075-4	1-640550-4	—	—
15	**1.500** [38.1]	1-643075-5	1-640550-5	—	—
16	**1.600** [40.64]	1-643075-6	1-640550-6	—	—
17	**1.700** [43.18]	1-643075-7	—	—	—
18	**1.800** [45.72]	1-643075-8	—	—	—
20	**2.000** [50.08]	2-643075-0	2-640550-0	—	—
24	**2.400** [60.96]	2-643075-4	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

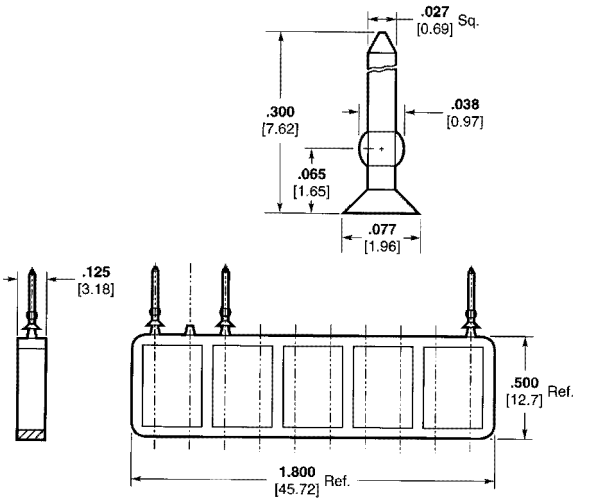
Printed Circuit Board Connectors (Continued)

MTA-100 IDC Connector Accessories

Keying Plug with Carrier Strip (10 plugs per strip)
Part Number: 641994-1

Material:

UL94V-2 rated, type 6/6 nylon, natural color



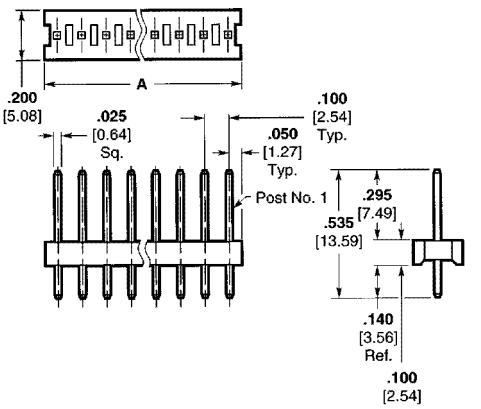
MTA-100 Flat Headers—Straight and Right Angle

Material and Finish:

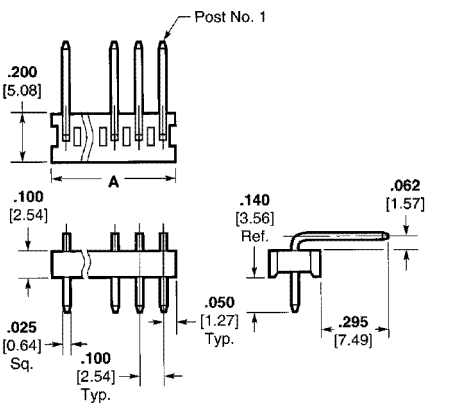
Housing—UL94V-0 rated, polyester, white

Posts—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Straight Post (.025 [0.64] Square)



Right Angle Post (.025 [0.64] Square)



No. of Circuits	Dim. A	Straight Posts Header Part No.	Right Angle Posts Header Part No.
2	**.200** [5.08]	640452-2	640453-2
3	**.300** [7.62]	640452-3	640453-3
4	**.400** [10.16]	640452-4	640453-4
5	**.500** [12.7]	640452-5	640453-5
6	**.600** [15.24]	640452-6	640453-6
7	**.700** [17.78]	640452-7	640453-7
8	**.800** [20.32]	640452-8	640453-8
9	**.900** [22.86]	—	640453-9
10	**1.00** [25.4]	1-640452-0	1-640453-0
12	**1.200** [30.48]	—	1-640453-2
16	**1.600** [40.64]	—	1-640453-6

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

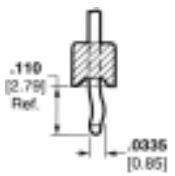
MTA-100 Narrow Flat Headers—Straight and Right Angle

Material and Finish:

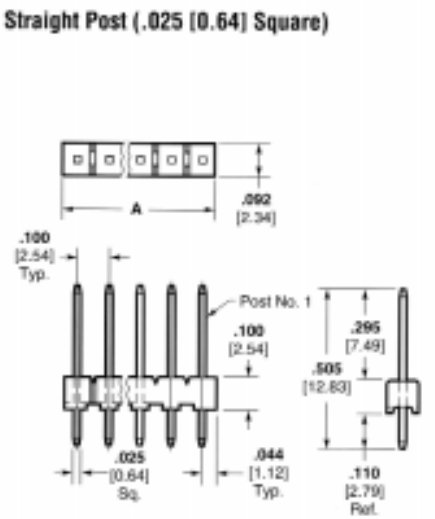
Housing—UL94V-0 rated, polyester, white

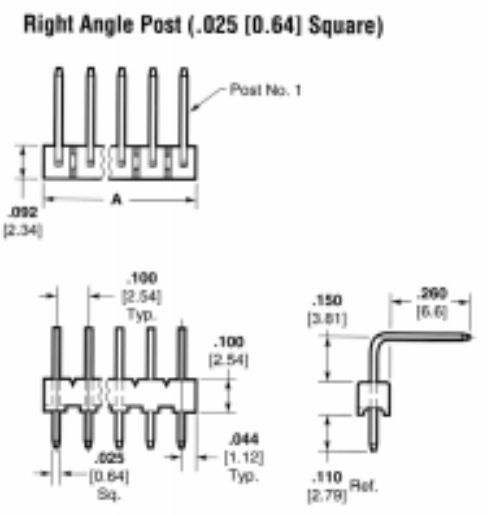
Posts—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Straight and Right Angle Post with Retentive Legs



Printed Circuit Board Connectors (Continued)





No. of Circuits	Dim. A	Straight Posts		Right Angle Posts	
		Without Retentive Legs Header Part No.	With Retentive Legs Header Part No.	Without Retentive Legs Header Part No.	With Retentive Legs Header Part No.
2	**.188** [4.78]	644456-2	—	644457-2	—
3	**.288** [7.32]	644456-3	—	—	—
4	**.388** [9.86]	644456-4	—	—	—
5	**.488** [12.40]	644456-5	—	—	—
6	**.588** [14.94]	644456-6	—	—	—
7	**.688** [17.48]	—	—	644457-7	—
8	**.788** [20.02]	—	—	—	644694-8
12	**1.188** [30.18]	—	1-644695-2	—	—
14	**1.388** [35.26]	1-644456-4	—	—	—
16	**1.588** [40.34]	1-644456-6	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

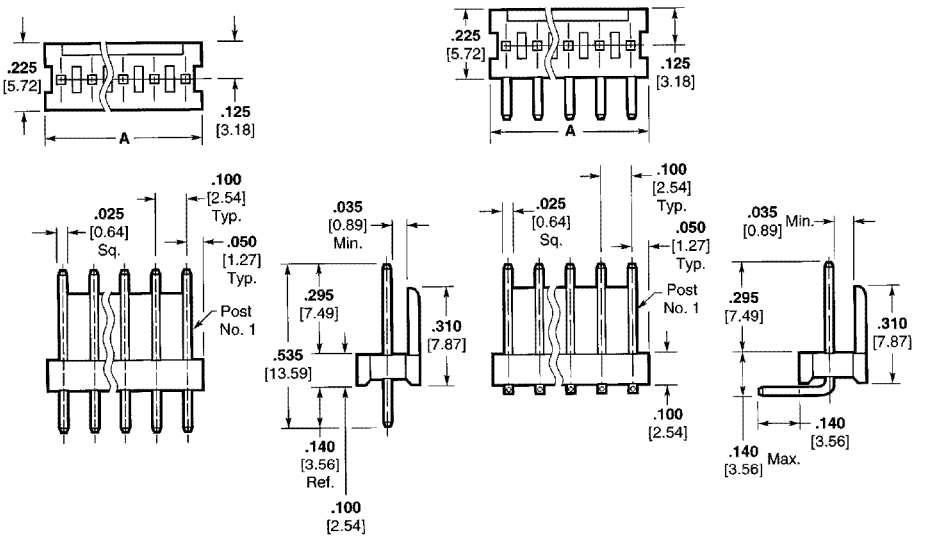
MTA-100 Polarized Headers—Straight and Right Angle

Material and Finish:

Housing—UL94V-0 rated, polyester, white

Posts—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Printed Circuit Board Connectors (Continued)



No. of Circuits	Dim. A	Straight Posts Header Part No.	Right Angle Posts Header Part No.
Standard UL94V-0, Tin Plated			
2	**.200** [5.08]	640454-2	640455-2
3	**.300** [7.62]	640454-3	640455-3
4	**.400** [10.16]	640454-4	640455-4
5	**.500** [12.7]	640454-5	640455-5
6	**.600** [15.24]	640454-6	640455-6
7	**.700** [17.78]	640454-7	—
8	**.800** [20.32]	640454-8	1-640455-8
9	**.900** [22.86]	640454-9	—
10	**1.00** [25.4]	1-640454-0	1-640455-0
11	**1.100** [27.94]	1-640454-1	—
12	**1.200** [30.48]	1-640454-2	1-640455-2
13	**1.300** [33.02]	1-640454-3	—
14	**1.400** [35.56]	1-640454-4	—
15	**1.500** [38.1]	1-640454-5	—
16	**1.600** [40.64]	1-640454-6	—
20	**2.000** [50.8]	2-640454-0	—
Standard UL94V-0, .000030 [0.00076] Gold Plated			
2	**.200** [5.08]	641213-2	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-100 Friction Lock Headers—Straight and Right Angle

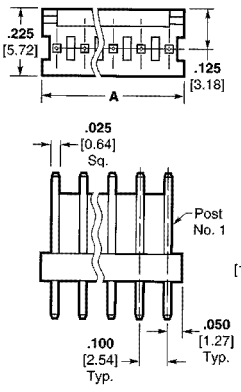
Material and Finish:

Housing—UL94V-0 rated, polyester, white

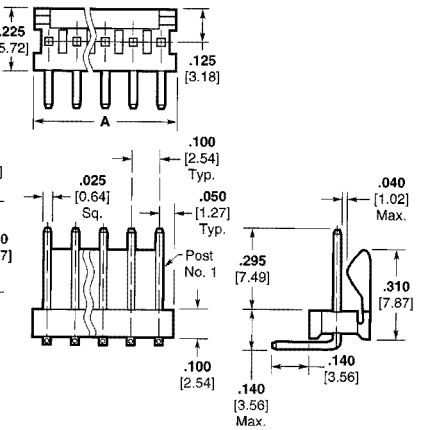
Posts—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Printed Circuit Board Connectors (Continued)

Straight Post (.025 [0.64] Square)



Right Angle Post (.025 [0.64] Square)



No. of Circuits	Dim. A	Straight Posts Header Part No.	Right Angle Posts Header Part No.
Standard UL94V-0, Tin Plated			
2	**.200** [5.08]	640456-2	1-640457-2
3	**.300** [7.62]	640456-3	1-640457-3
4	**.400** [10.16]	640456-4	1-640457-4
5	**.500** [12.7]	640456-5	1-640457-5
6	**.600** [15.24]	640456-6	1-640457-6
7	**.700** [17.78]	640456-7	1-640457-7
8	**.800** [20.32]	640456-8	1-640457-8
9	**.900** [22.86]	640456-9	1-640457-9
10	**1.00** [25.4]	1-640456-0	1-640457-0
11	**1.100** [27.94]	1-640456-1	1-640457-0
12	**1.200** [30.48]	1-640456-2	1-640457-2
13	**1.300** [33.02]	1-640456-3	1-640457-3
14	**1.400** [35.56]	1-640456-4	1-640457-4
15	**1.500** [38.1]	1-640456-5	1-640457-5
16	**1.600** [40.64]	1-640456-6	1-640457-6
17	**1.700** [43.18]	1-640456-7	—
18	**1.800** [45.72]	1-640456-8	—
20	**2.000** [50.8]	2-640456-0	2-640457-0
22	**2.200** [55.88]	2-640456-2	—
24	**2.400** [60.96]	2-640456-4	—
Standard UL94V-0, .000030 [0.00076] Gold Plated			
2	**.200** [5.08]	641215-2	641216-2
3	**.300** [7.62]	641215-3	641216-3
4	**.400** [10.16]	641215-4	641216-4
5	**.500** [12.7]	641215-5	641216-5
6	**.600** [15.24]	641215-6	—
7	**.700** [17.78]	641215-7	641216-7
8	**.800** [20.32]	641215-8	—
9	**.900** [22.86]	641215-9	—
10	**1.00** [25.4]	1-641215-0	—
12	**1.200** [30.48]	1-641215-2	—
14	**1.400** [35.56]	1-641215-4	—
16	**1.600** [40.64]	1-641215-6	—
24	**2.400** [60.96]	2-641215-4	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-100 Friction Lock Headers—Straight and Right Angle (continued)

Printed Circuit Board Connectors (Continued)

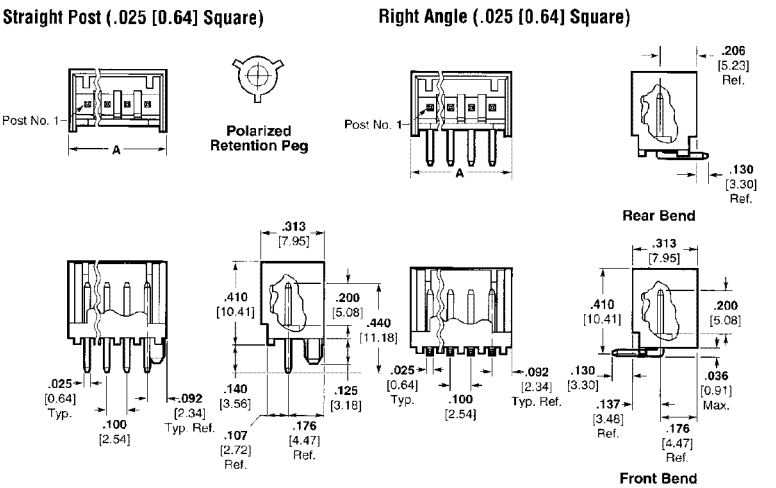
No. of Circuits	Dim. A	Straight Posts Header Part No.	Right Angle Posts Header Part No.
Standard UL94V-0, .000015 [0.00038] Gold Plated			
2	**.200** [5.08]	641126-2	—
3	**.300** [7.62]	641126-3	641127-3
4	**.400** [10.16]	641126-4	641127-4
5	**.500** [12.7]	641126-5	641127-5
6	**.600** [15.24]	641126-6	—
7	**.700** [17.78]	641126-7	—
8	**.800** [20.32]	641126-8	—
9	**.900** [22.86]	641126-9	—
10	**1.00** [25.4]	1-641126-0	—
12	**1.200** [30.48]	1-641126-2	—
14	**1.400** [35.56]	1-641126-4	—
24	**2.400** [60.96]	2-641126-4	—

MTA-100 Shrouded Headers—Straight and Right Angle

Material and Finish:

Housing—UL94V-0 rated, polyester, white

Posts—Copper alloy, tin plated; or .000030 [0.00076] gold over nickel



No. of Circuits	Dim. A	Straight Posts With Pegs Header Part No.	Right Angle Posts Front Bend Without Pegs Header Part No.	Right Angle Posts Rear Bend Without Pegs Header Part No.
Standard UL94V-0, Tin Plated				
2	**.284** [7.21]	644486-2	—	—
3	**.384** [9.75]	644486-3	—	644803-3
4	**.484** [12.29]	644486-4	—	—
5	**.584** [14.83]	644486-5	644488-5	—
6	**.684** [17.37]	644486-6	—	—
8	**.884** [22.45]	644486-8	—	—
9	**.984** [24.99]	644486-9	—	—
10	**1.084** [27.53]	1-644486-0	—	—
12	**1.284** [32.61]	1-644486-2	—	—
Standard UL94V-0, .000030 [0.00076] Gold Plated				
2	**.284** [7.21]	644487-2	—	—
3	**.384** [9.75]	644487-3	—	—

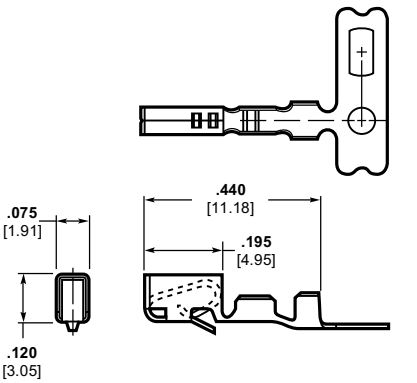
Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

Printed Circuit Board Connectors (Continued)

.100 [2.54] Centerline CST-100 Crimp Contacts

Part Numbers	
Tin Plated	Gold Plated
770601-1 (Strip)	770601-2 (Strip)
770666-1 (Loose Piece)	770666-2 (Loose Piece)



Material and Finish:

Phosphor bronze, pretinned or .000030 [0.00076] gold over nickel

Wire Range—22-26 AWG [0.4-0.12 mm²]

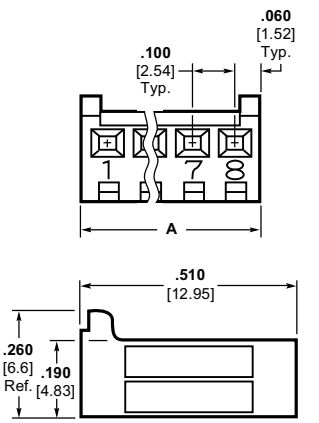
Max. Ins. Dia.—.065 [1.65]

.100 [2.54] Centerline CST-100 Housings

Material and Finish:

UL94V-0 rated, type 6/6 nylon, white

No. of Pos.	Dim. A	Part Numbers
2	**.220** 5.59	770602-2
3	**.320** 8.13	770602-3
4	**.420** 10.67	770602-4
5	**.520** 13.21	770602-5
6	**.620** 15.75	770602-6
7	**.720** 18.29	770602-7
8	**.820** 20.83	770602-8
9	**.920** 23.37	770602-9
10	**1.020** 25.91	1-770602-0
12	**1.220** 30.99	1-770602-2
13	**1.320** 33.53	1-770602-3
14	**1.420** 36.07	1-770602-4
15	**1.520** 38.61	1-770602-5
16	**1.620** 41.15	1-770602-6
18	**1.820** 46.23	1-770602-8



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-156 IDC Connectors — Closed End

Material and Finish

Housing — UL94V-2 rated, type 6/6 or 6/12 nylon, see below for color; or UL94V-0 rated, nylon, black

Contacts — Phosphor bronze, post tin plated, .000030 [0.00076] or .000015 [.00038] post gold plated over nickel

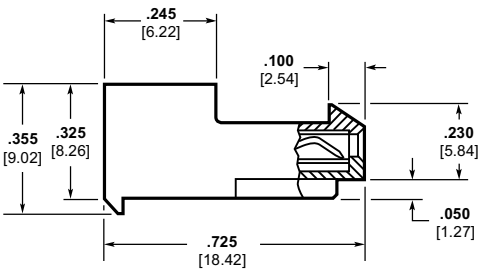
Color Coding by Wire Size for UL94V-2 Connectors

26 AWG — Blue
24 AWG — White
22 AWG — Red
20 AWG — Yellow
18 AWG — Orange

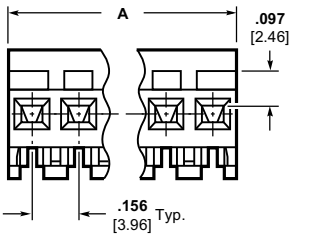
All Wire Sizes in UL94V-0 — Black

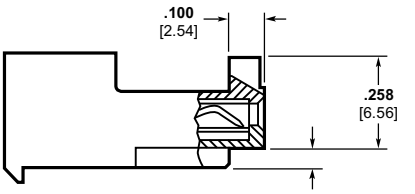
Printed Circuit Board Connectors (Continued)

Closed End with Locking Ramp



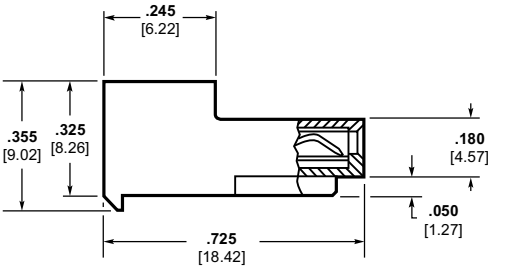
without Polarizing Tabs



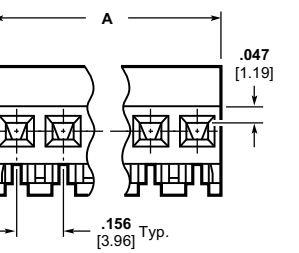


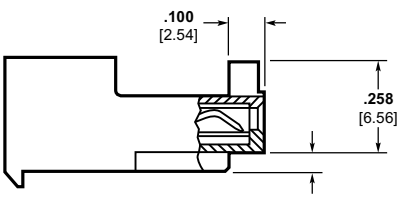
with Polarizing Tabs

Closed End without Locking Ramp



without Polarizing Tabs





with Polarizing Tabs

Printed Circuit Board Connectors (Continued)

MTA-156 IDC Connectors — Closed End (continued)

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End with Locking Ramp		Closed End without Locking Ramp	
			Without Tabs Part Nos.	With Tabs Part Nos.	Without Tabs Part Nos.	With Tabs Part Nos.
Standard UL94V-2, Tin Plated						
18 AWG [0.8-0.9 mm²]	2	**.312** [7.92]	640426-2	643817-2	640431-2	—
	3	**.468** [11.89]	640426-3	643817-3	640431-3	—
	4	**.624** [15.85]	640426-4	643817-4	640431-4	—
	5	**.780** [19.81]	640426-5	643817-5	640431-5	—
	6	**.936** [23.77]	640426-6	643817-6	640431-6	—
	7	**1.092** [27.74]	640426-7	643817-7	640431-7	—
	8	**1.248** [31.7]	640426-8	643817-8	640431-8	—
	9	**1.404** [35.66]	640426-9	643817-9	640431-9	—
	10	**1.560** [39.62]	1-640426-0	1-643817-0	1-640431-0	—
	11	**1.716** [43.59]	1-640426-1	—	1-640431-1	—
	12	**1.872** [47.55]	1-640426-2	1-643817-2	1-640431-2	—
	13	**2.028** [51.51]	1-640426-3	1-643817-3	1-640431-3	—
	14	**2.184** [55.47]	1-640426-4	1-643817-4	1-640431-4	—
	15	**2.340** [59.44]	1-640426-5	—	—	—
	16	**2.496** [63.4]	1-640426-6	—	—	—
	17	**2.652** [67.36]	—	—	—	—
	18	**2.808** [71.32]	1-640426-8	1-643817-8	—	—
20 AWG [0.5-0.6 mm²]	2	**.312** [7.92]	640427-2	643818-2	1-640432-2	—
	3	**.468** [11.89]	640427-3	643818-3	1-640432-3	—
	4	**.624** [15.85]	640427-4	643818-4	1-640432-4	—
	5	**.780** [19.81]	640427-5	643818-5	1-640432-5	—
	6	**.936** [23.77]	640427-6	643818-6	1-640432-6	644462-6
	7	**1.092** [27.74]	640427-7	—	—	—
	8	**1.248** [31.7]	640427-8	—	—	—
	9	**1.404** [35.66]	640427-9	—	—	—
	10	**1.560** [39.62]	1-640427-0	—	1-640432-0	—
	12	**1.872** [47.55]	1-640427-2	—	1-640432-2	—
	15	**2.340** [59.44]	1-640427-5	—	—	—
22 AWG [0.3-0.4 mm²]	2	**.312** [7.92]	640428-2	643819-2	640433-2	—
	3	**.468** [11.89]	640428-3	643819-3	640433-3	—
	4	**.624** [15.85]	640428-4	643819-4	640433-4	—
	5	**.780** [19.81]	640428-5	643819-5	640433-5	—
	6	**.936** [23.77]	640428-6	643819-6	640433-6	—
	7	**1.092** [27.74]	640428-7	643819-7	640433-7	—
	8	**1.248** [31.7]	640428-8	643819-8	640433-8	—
	9	**1.404** [35.66]	640428-9	—	640433-9	—
	10	**1.560** [39.62]	1-640428-0	—	1-640433-0	—
	12	**1.872** [47.55]	1-640428-2	1-643819-2	1-640433-2	—
	13	**2.028** [51.51]	—	1-643819-3	—	—
	14	**2.184** [55.47]	1-640428-4	—	—	—
	15	**2.340** [59.44]	1-640428-5	—	—	—
	17	**2.652** [67.36]	—	—	1-640433-7	—
24 AWG [0.2 mm²]	2	**.312** [7.92]	640429-2	643820-2	—	—
	3	**.468** [11.89]	640429-3	643820-3	—	—
	4	**.624** [15.85]	640429-4	643820-4	—	—
	5	**.780** [19.81]	640429-5	—	—	—
	6	**.936** [23.77]	640429-6	—	—	—
	7	**1.092** [27.74]	640429-7	—	640434-7	—
	8	**1.248** [31.7]	640429-8	—	—	—
	9	**1.404** [35.66]	640429-9	—	—	—
	10	**1.560** [39.62]	1-640429-0	—	—	—
	12	**1.872** [47.55]	1-640429-2	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Printed Circuit Board Connectors (Continued)

MTA-156 IDC Connectors — Closed End (continued)

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End with Locking Ramp		Closed End without Locking Ramp	
			Without Tabs Part Nos.	With Tabs Part Nos.	Without Tabs Part Nos.	With Tabs Part Nos.
Tape Mounted on Reel UL94V-2, Tin Plated						
20 AWG [0.5-0.6 mm²]	2	**.312** [7.92]	640473-2	—	—	—
Standard UL94V-2, .000030 [0.00076] Gold Plated						
18 AWG [0.8-0.9 mm²]	2	**.312** [7.92]	641217-2	644460-2	—	—
	3	**.468** [11.89]	641217-3	644460-3	—	—
	4	**.624** [15.85]	641217-4	644460-4	—	—
	5	**.780** [19.81]	641217-5	644460-5	—	—
	6	**.936** [23.77]	641217-6	644460-6	—	—
	9	**1.404** [35.66]	641217-9	—	—	—
	12	**1.872** [47.55]	—	1-644460-2	—	—
20 AWG [0.5-0.6 mm²]	4	**.624** [15.85]	641218-4	—	640433-4	—
	6	**.936** [23.77]	—	644663-6	640433-6	—
22 AWG [0.3-0.4 mm²]	2	**.312** [7.92]	641219-2	—	—	—
	3	**.468** [11.89]	641219-3	—	—	—
	4	**.624** [15.85]	641219-4	—	—	—
Standard UL94V-2, .000015 [0.00038] Gold Plated						
18 AWG [0.8-0.9 mm²]	4	**.624** [15.85]	641148-4	—	—	—
	8	**1.248** [31.7]	641148-8	—	—	—
	9	**1.404** [35.66]	641148-9	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-156 IDC Connectors — Feed-Thru

Material and Finish

Housing — UL94V-2 rated, type 6/6 or 6/12 nylon, see below for color; or UL94V-0 rated, nylon, black

Contacts — Phosphor bronze; post tin plated, .000030 [.00076] or .000015 [.00038] post gold plated over nickel

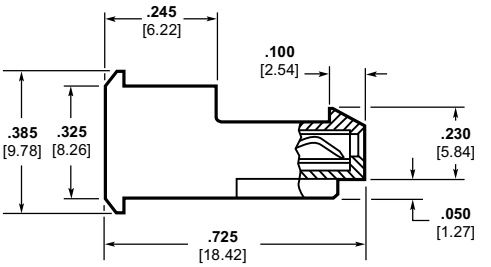
Color Coding by Wire Size for UL94V-2 Connectors

26 AWG — Blue
24 AWG — White
22 AWG — Red
20 AWG — Yellow
18 AWG — Orange

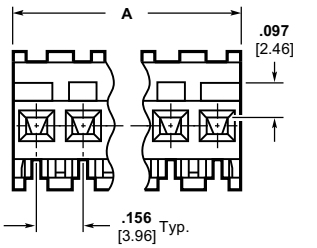
All Wire Sizes in UL94V-0 — Black

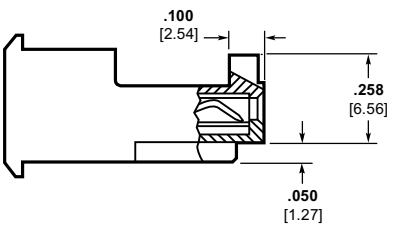
Printed Circuit Board Connectors (Continued)

Feed-Thru with Locking Ramp



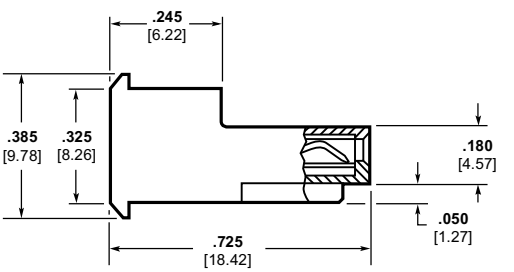
without Polarizing Tabs



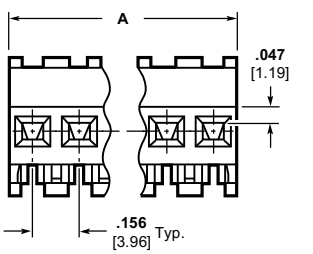


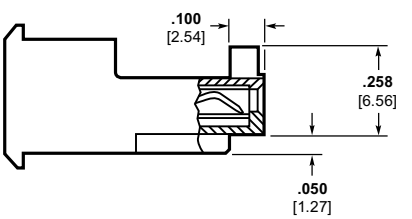
with Polarizing Tabs

Feed-Thru without Locking Ramp



without Polarizing Tabs





with Polarizing Tabs

Printed Circuit Board Connectors (Continued)

MTA-156 IDC Connectors — Feed-Thru (continued)

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End with Locking Ramp Without Tabs Part Nos.	Closed End without Locking Ramp Without Tabs Part Nos.
Standard UL94V-2, Tin Plated				
18 AWG [0.8-0.9 mm²]	2	**.312** [7.92]	640599-2	—
	3	**.468** [11.89]	640599-3	—
	4	**.624** [15.85]	640599-4	—
	5	**.780** [19.81]	640599-5	640604-5
	6	**.936** [23.77]	640599-6	640604-6
	8	**1.248** [31.7]	640599-8	—
	9	**1.404** [35.66]	640599-9	640604-9
	10	**1.560** [39.62]	1-640599-0	—
	13	**2.028** [51.51]	1-640599-3	—
	14	**2.184** [55.47]	1-640599-4	1-640604-4
20 AWG [0.5-0.6 mm²]	2	**.312** [7.92]	640600-2	—
	3	**.468** [11.89]	640600-3	—
	4	**.624** [15.85]	640600-4	—
	6	**.936** [23.77]	640600-6	—
	9	**1.404** [35.66]	640600-9	—
22 AWG [0.3-0.4 mm²]	2	**.312** [7.92]	640601-2	—
	3	**.468** [11.89]	640601-3	—
	4	**.624** [15.85]	640601-4	640606-4
	5	**.780** [19.81]	640601-5	—
	6	**.936** [23.77]	640601-6	—
	8	**1.248** [31.7]	640601-8	—
	9	**1.404** [35.66]	640601-9	—
	10	**1.560** [39.62]	1-640601-0	—
24 AWG [0.2 mm²]	14	**2.184** [55.47]	1-640602-4	—
Standard UL94V-2, Tin Plated				
18 AWG [0.8-0.9 mm²]	6	**.936** [23.77]	641168-6	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-156 Connector Accessories

Closed End Covers

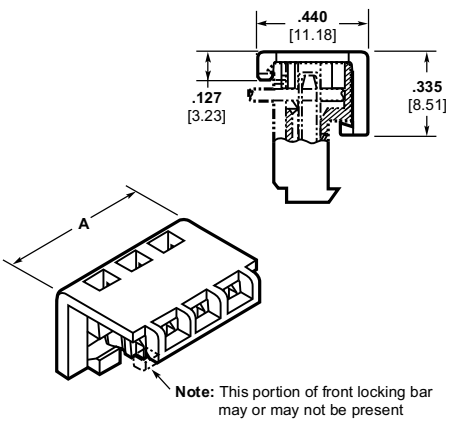
Material

Strain Relief Covers — UL94V-2 rated, nylon, white

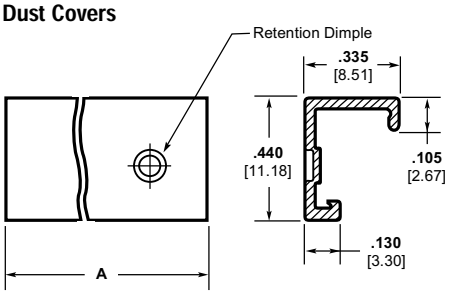
Dust Covers — UL94V-0 rated, polyester, white

Printed Circuit Board Connectors (Continued)

Strain Relief Covers



Dust Covers



No. of Circuits	Dim. A	Closed End		Feed-Thru	
		Strain Relief Covers Part Nos.	Dust Covers Part Nos.	Strain Relief Covers Part Nos.	Dust Covers Part Nos.
2	**.312** [7.92]	643067-2	640551-2	643071-2	—
3	**.468** [11.89]	643067-3	640551-3	643071-3	640643-3
4	**.624** [15.85]	643067-4	640551-4	643071-4	640643-4
5	**.780** [19.81]	643067-5	640551-5	643071-5	640643-5
6	**.936** [23.77]	643067-6	640551-6	643071-6	640643-6
7	**1.092** [27.74]	643067-7	640551-7	—	—
8	**1.248** [31.7]	643067-8	640551-8	—	—
9	**1.404** [35.66]	643067-9	640551-9	643071-9	—
10	**1.560** [39.62]	1-643067-0	1-640551-0	1-643071-0	—
11	**1.716** [43.59]	1-643067-1	1-640551-1	—	—
12	**1.872** [47.55]	1-643067-2	1-640551-2	1-643071-2	—
13	**2.028** [51.51]	1-643067-3	1-640551-3	1-643071-3	—
14	**2.184** [55.47]	1-643067-4	1-640551-4	—	—
15	**2.340** [59.44]	1-643067-5	—	1-643071-5	—
18	**2.808** [71.32]	1-643067-8	—	1-643071-8	—
22	**3.432** [87.17]	643067-2	—	—	—

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-156 Connector Accessories

Keying Plugs

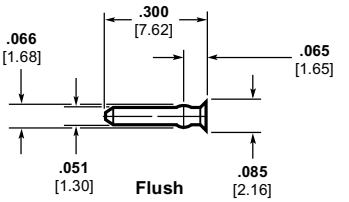
Material

UL94V-2 rated, type 6/6 nylon, natural color

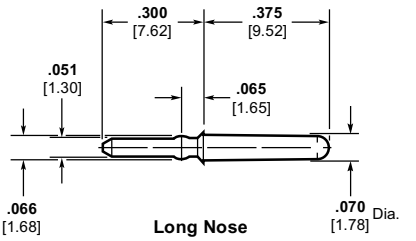
Printed Circuit Board Connectors (Continued)

Loose Piece

Part No. 640629-1 (Flush)
Used with keyed headers

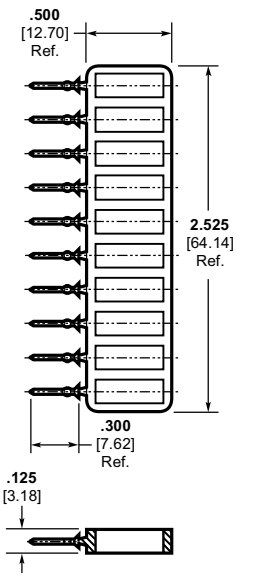


Part No. 640630-1 (Long Nose)



On Carrier Strip

Part No. 641623-1 (Flush)
(10 per strip)

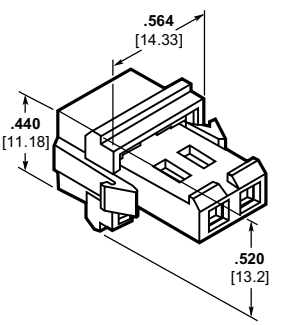


Panel Mount End Caps

Part No. 641440-1
(2-position only)

Material

UL94V-2 rated, nylon, black



Two-Position Only
641533-1

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-156 IDC Posted Connectors (Wire-to-Wire) — Closed End, Feed-Thru

Material and Finish

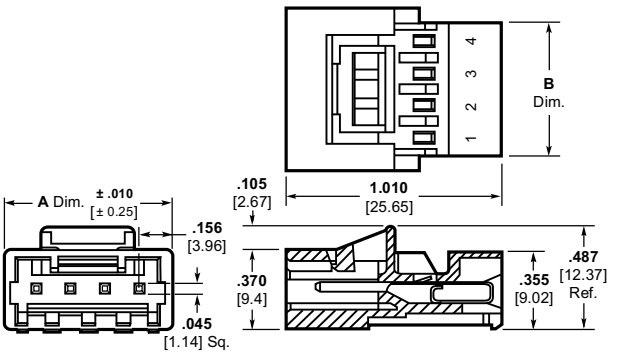
Housing — UL94V-2 rated, 6/6, 6/12 nylon, see chart for color

Contacts — Copper alloy, post tin or .000030 [.00076] plated over nickel

Color Coding by Wire Size For UL94V-0 Connectors

24 AWG — White
22 AWG — Red
20 AWG — Yellow
18 AWG — Orange

Printed Circuit Board Connectors (Continued)



Connector Type & Wire Size	No. of Circuits	Dim. A	Dim. B	Closed End Connector Part Nos.
Standard UL94V-2, Tin Plated				
18 AWG [0.8-0.9 mm²]	2	**.468** [11.89]	**.316** [8.03]	641435-2
	3	**.624** [15.85]	**.472** [11.99]	641435-3
	4	**.780** [19.81]	**.628** [15.95]	641435-4
	6	**1.092** [27.74]	**.940** [23.88]	641435-5
	12	**2.028** [51.51]	**1.876** [47.65]	1-641435-2
20 AWG [0.5-0.6 mm²]	4	**.780** [19.81]	**.628** [15.95]	641436-4
22 AWG [0.3-0.4 mm²]	2	**.468** [11.89]	**.316** [8.03]	641437-2
	3	**.624** [15.85]	**.472** [11.99]	641437-3
	4	**.780** [19.81]	**.628** [15.95]	641437-4
	6	**1.092** [27.74]	**.940** [23.88]	641437-5
	12	**2.028** [51.51]	**1.876** [47.65]	1-641437-2
24 AWG [0.2 mm²]	2	**.468** [11.89]	**.316** [8.03]	641438-2
	4	**.780** [19.81]	**.628** [15.95]	641438-4

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

Printed Circuit Board Connectors (Continued)

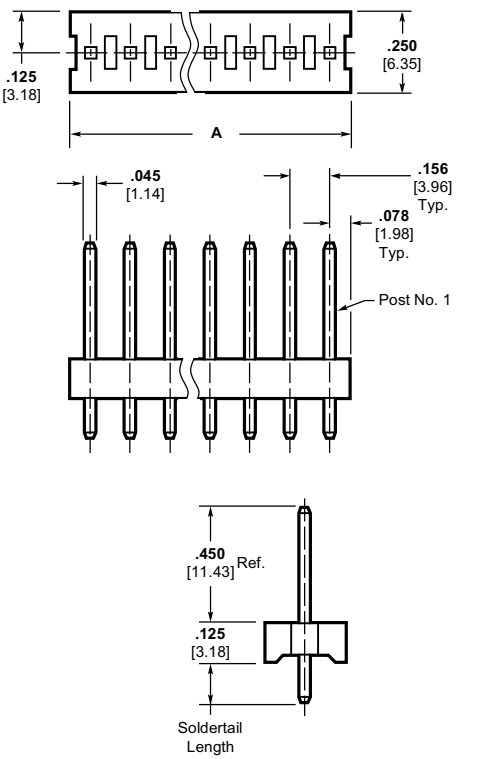
MTA-156 Flat Headers — Straight .125 [3.18] Soldertail

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

No. of Posts	Dim. A	Square Posts Header Part Nos.	Round Posts Header Part Nos.
Standard UL94V-0, Tin Plated			
2	**.312** [7.92]	640383-2	—
3	**.468** [11.89]	640383-3	—
4	**.624** [15.85]	640383-4	640384-4
5	**.780** [19.81]	640383-5	640384-5
6	**.936** [23.77]	640383-6	—
7	**1.092** [27.74]	640383-7	—
8	**1.248** [31.7]	640383-8	—
9	**1.404** [35.66]	640383-9	—
10	**1.560** [39.62]	1-640383-0	—
11	**1.716** [43.59]	1-640383-1	—
12	**1.872** [47.55]	1-640383-2	—
13	**2.028** [51.51]	1-640383-3	—
14	**2.184** [55.47]	1-640383-4	—
15	**2.340** [59.44]	1-640383-5	—
16	**2.496** [63.4]	1-640383-6	—



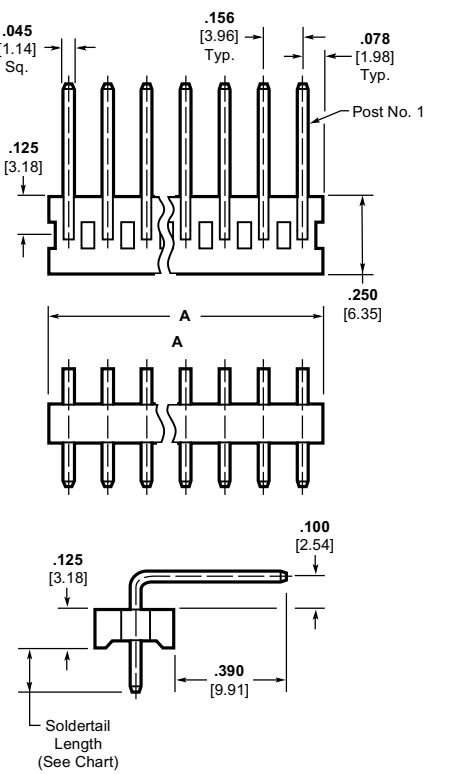
MTA-156 Flat Headers — Right Angle .125 [3.18] Soldertail

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

No. of Posts	Dim. A	Square Posts Header Part Nos.
Standard UL94V-0, Tin Plated		
2	**.312** [7.92]	640385-2
3	**.468** [11.89]	640385-3
4	**.624** [15.85]	640385-4
5	**.780** [19.81]	640385-5
6	**.936** [23.77]	640385-6
7	**1.092** [27.74]	640385-7
8	**1.248** [31.7]	640385-8
9	**1.404** [35.66]	640385-9
10	**1.560** [39.62]	1-640385-0
11	**1.716** [43.59]	1-640385-1
12	**1.872** [47.55]	1-640385-2



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-156 Friction Lock Headers — Straight .125 [3.18] Soldertail

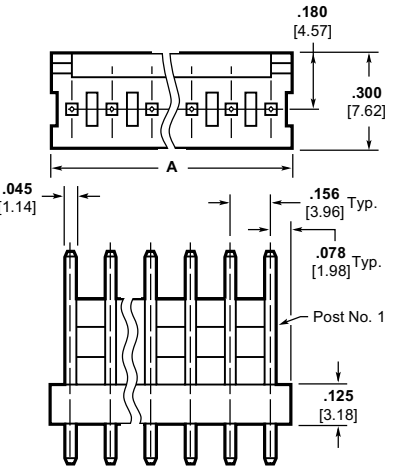
Material and Finish

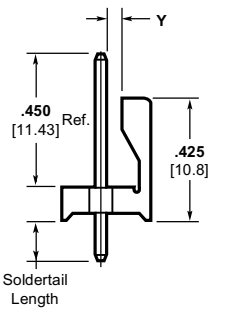
Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Printed Circuit Board Connectors (Continued)

No. of Posts	Dim. A	Square Posts Header Part Nos.	Round Posts Header Part Nos.
Standard UL94V-0, Tin Plated			
2	**.312** [7.92]	640445-2	640388-2
3	**.468** [11.89]	640445-3	640388-3
4	**.624** [15.85]	640445-4	640388-4
5	**.780** [19.81]	640445-5	640388-5
6	**.936** [23.77]	640445-6	640388-6
7	**1.092** [27.74]	640445-7	640388-7
8	**1.248** [31.7]	640445-8	640388-8
9	**1.404** [35.66]	640445-9	640388-9
10	**1.560** [39.62]	1-640445-0	1-640388-0
11	**1.716** [43.59]	1-640445-1	1-640388-1
12	**1.872** [47.55]	1-640445-2	1-640388-2
13	**2.028** [51.51]	1-640445-3	—
14	**2.184** [55.47]	1-640445-4	1-640388-4
15	**2.340** [59.44]	1-640445-5	1-640388-5
16	**2.496** [63.4]	1-640445-6	—
18	**2.808** [71.32]	1-640445-6	1-640388-8
20	**3.120** [79.25]	2-640445-0	2-640388-0
Standard UL94V-0, .000030 [0.00076] Gold Plated			
2	**.312** [7.92]	641208-2	—
3	**.468** [11.89]	641208-3	—
4	**.624** [15.85]	641208-4	—
5	**.780** [19.81]	641208-5	—
6	**.936** [23.77]	641208-6	—
7	**1.092** [27.74]	641208-7	—
8	**1.248** [31.7]	641208-8	—
9	**1.404** [35.66]	641208-9	—
10	**1.560** [39.62]	1-641208-0	—
11	**1.716** [43.59]	1-641208-1	—
12	**1.872** [47.55]	1-641208-2	—
13	**2.028** [51.51]	1-641208-3	—
Standard UL94V-0, .000015 [0.00038] Gold Plated			
2	**.312** [7.92]	641119-2	—
3	**.468** [11.89]	641119-3	—
4	**.624** [15.85]	641119-4	—
6	**.936** [23.77]	641119-6	—
8	**1.248** [31.7]	641119-8	—
10	**1.560** [39.62]	1-641119-0	—





Y = .068 [1.73] 2-8 position tin plated and 2-24 position gold plated headers.

Y = .073 [1.85] 9-24 position tin plated headers.

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

MTA-156 Friction Lock Headers — Right Angle .125 [3.18] Soldertail

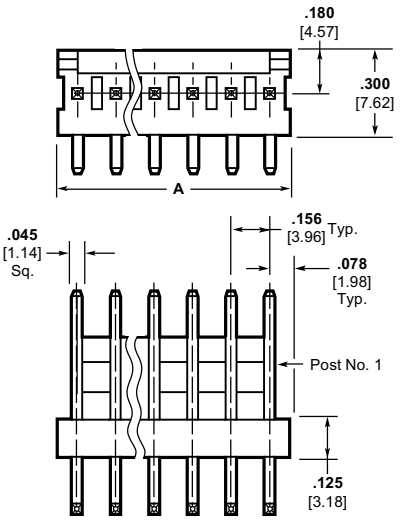
Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

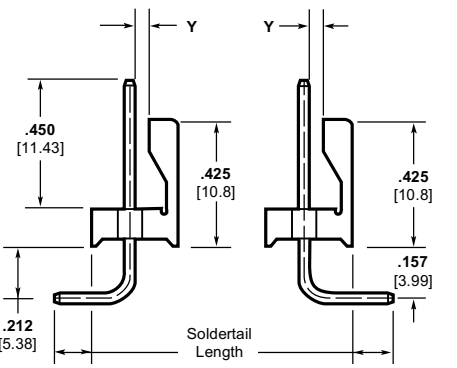
Printed Circuit Board Connectors (Continued)

No. of Posts	Dim. A	Front Bend Header Part Nos.	Rear Bend Header Part Nos.
Standard UL94V-0, Tin Plated			
2	**.312** [7.92]	640389-2	640387-2
3	**.468** [11.89]	640389-3	640387-3
4	**.624** [15.85]	640389-4	640387-4
5	**.780** [19.81]	640389-5	640387-5
6	**.936** [23.77]	640389-6	640387-6
7	**1.092** [27.74]	640389-7	640387-7
8	**1.248** [31.7]	640389-8	640387-8
9	**1.404** [35.66]	640389-9	—
10	**1.560** [39.62]	1-640389-0	1-640387-0
11	**1.716** [43.59]	1-640389-1	—
12	**1.872** [47.55]	1-640389-2	1-640387-2
13	**2.028** [51.51]	1-640389-3	—
14	**2.184** [55.47]	—	1-640387-4
15	**2.340** [59.44]	1-640389-5	1-640387-5
18	**2.808** [71.32]	1-640389-6	—
Standard UL94V-0, .000030 [0.00076] Gold Plated			
3	**.468** [11.89]	641210-3	—
5	**.780** [19.81]	641210-5	—
6	**.936** [23.77]	641210-6	—
12	**1.872** [47.55]	1-641210-2	—



Y = .068 [1.73] 2-8 position tin plated and 2-24 position gold plated headers.

Y = .073 [1.85] 9-24 position tin plated headers.



Front Bend **Rear Bend**

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

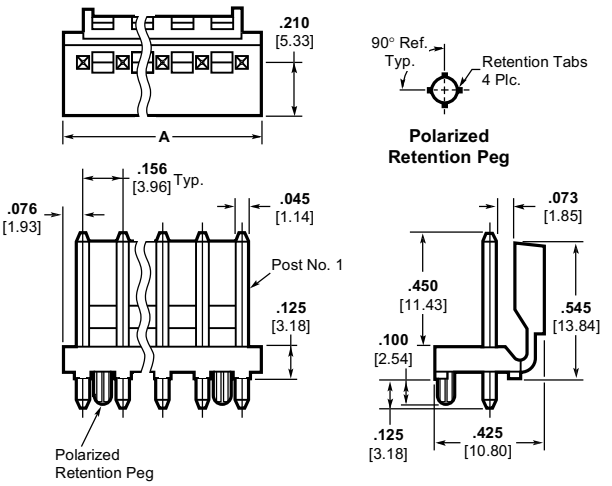
Printed Circuit Board Connectors (Continued)

MTA-156 Polarized Lock Headers — Straight

Material and Finish

Housing — UL94V-0 rated, polyester, white

Posts — Copper alloy, tin plated or .000030 [0.00076] gold over nickel



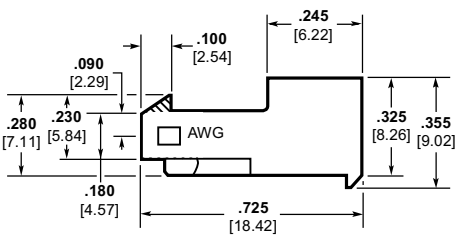
No. of Posts	Dim. A	Square Posts With Pegs Header Part Nos.
Standard UL94V-0, .000030 [0.00076] Gold Plated		
2	**.307** [7.80]	644631-2
12	**1.867** [47.42]	1-644631-2

MTA-156 IDC Quad Connectors — Closed End

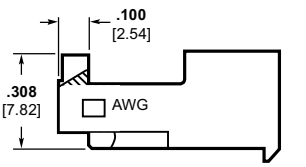
Material and Finish

Housing — UL94V-0 rated, 6/6 nylon, black

Contacts — High conductivity copper alloy, post tin plated



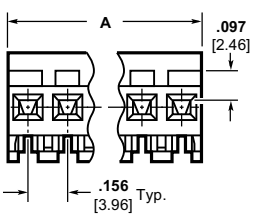
without Polarizing Tabs



with Polarizing Tabs

Connector Type & Wire Size	No. of Circuits	Dim. A	Closed End with Locking Ramp Without Tabs Connector Part Nos.	Closed End with Locking Ramp With Tabs Connector Part Nos.
Standard UL94V-0, Tin Plated				
18 AWG [0.8-0.9 mm²]	2	**.312** [7.92]	—	644381-2
	3	**.468** [11.89]	—	644381-3
	4	**.624** [15.85]	644329-4	—
	8	**1.248** [31.7]	—	644381-8
	12	**1.872** [47.55]	—	1-644381-2

Closed End with Locking Ramp



Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

MTA-100 and MTA-156 Connectors and Headers; CST-100 Connectors and Headers and SL-156 Connectors

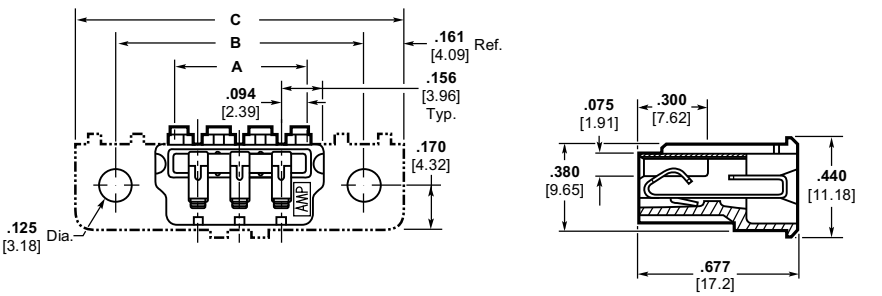
Printed Circuit Board Connectors (Continued)

MTA-156 IDC Card Edge Connectors — Feed-Thru Without Mounting Ears

Material and Finish

Housing — UL94V-0 rated, polyester, see chart for color

Contacts — Phosphor bronze, post tin plated



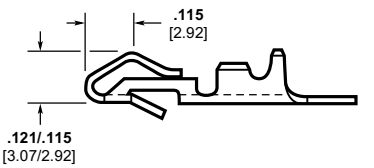
Connector Type & Wire Size	No. of Circuits	Dim. A	Dim. B	Dim. C	Connector Part Nos.
Standard UL94V-0, Tin Plated					
18 AWG [0.8-0.9 mm²]	3	**.500** [12.7]	**.926** [23.52]	**1.248** [31.7]	641293-3

SL-.156 Crimp Contacts

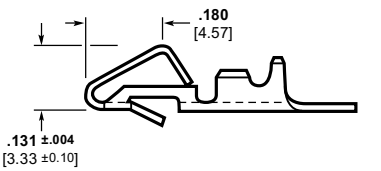
Contacts

Material and Finish

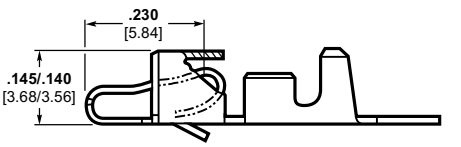
.012 [0.3] bright tin plated brass or phosphor bronze; .012 [0.3] pre-tin brass; or .012 [0.3] brass or phosphor bronze with .000030 [0.00076] gold over nickel (see chart)



A
High Force
(6.5 Amp Max. Current Rating)



B
Low Force
(6.5 Amp Max. Current Rating)



C
Hooded (Dual Wipe)
(10 Amp. Max. Current Rating)

Contact	Material and Finish	Part Numbers	
		Strip	Loose Piece
A	brass, bright tin plated	640252-1	640706-1
	brass, pre-tin plated	640252-2	640706-2
B	brass, bright tin plated	—	640707-1
	brass, pre-tin plated	350980-2	—
	brass, gold plated	350980-3	770258-1
C	phosphor bronze, bright tin plated	770476-1	770522-1
	phosphor bronze, gold plated	770476-2	770522-2

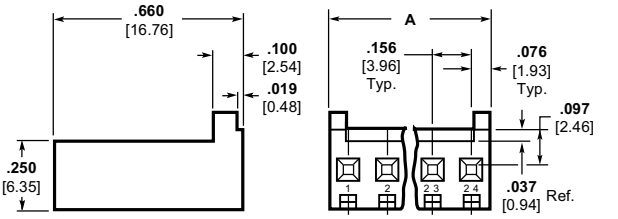
Printed Circuit Board Connectors (Continued)

SL-156 Housings — Wire-to-Board

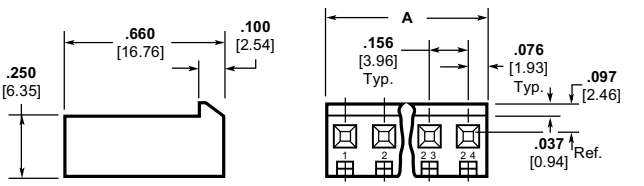
Housings

Material

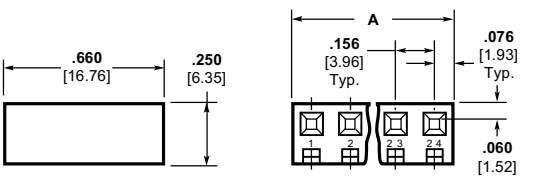
UL94V-0 rated, type 6/6 nylon, white



With Locking Ramp/With Polarizing Tabs



With Locking Ramp/Without Polarizing Tabs



Without Locking Ramp/Without PolarizingTabs

No. of Pos.	Dim. A	With Ramp/ With Tabs	With Ramp/ Without Tabs	Without Ramp/ Without Tabs
1	**.152** 3.86	—	640250-1	640251-1
2	**.308** 7.82	770849-2	640250-2	640251-2
3	**.465** 11.81	770849-3	640250-3	640251-3
4	**.620** 15.75	770849-4	640250-4	640251-4
5	**.777** 19.74	770849-5	640250-5	640251-5
6	**.933** 23.70	770849-6	640250-6	640251-6
7	**1.090** 27.69	770849-7	640250-7	640251-7
8	**1.246** 31.65	770849-8	640250-8	640251-8
9	**1.402** 35.61	770849-9	640250-9	640251-9
10	**1.558** 39.57	1-770849-0	1-640250-0	1-640251-0
11	**1.715** 43.56	1-770849-1	1-640250-1	1-640251-1

No. of Pos.	Dim. A	With Ramp/ With Tabs	With Ramp/ Without Tabs	Without Ramp/ Without Tabs
12	**1.871** 47.52	1-770849-2	1-640250-2	1-640251-2
13	**2.027** 51.49	1-770849-3	1-640250-3	1-640251-3
14	**2.183** 55.45	1-770849-4	1-640250-4	1-640251-4
15	**2.340** 59.44	—	1-640250-5	1-640251-5
16	**2.496** 63.40	1-770849-6	1-640250-6	—
18	**2.808** 71.32	—	1-640250-8	1-640251-8
19	**2.965** 75.31	—	—	1-640251-9
20	**3.121** 79.27	—	—	2-640251-0
22	**3.433** 87.20	—	2-640250-2	2-640251-2
24	**3.746** 95.15	—	2-640250-4	2-640251-4

Note:
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

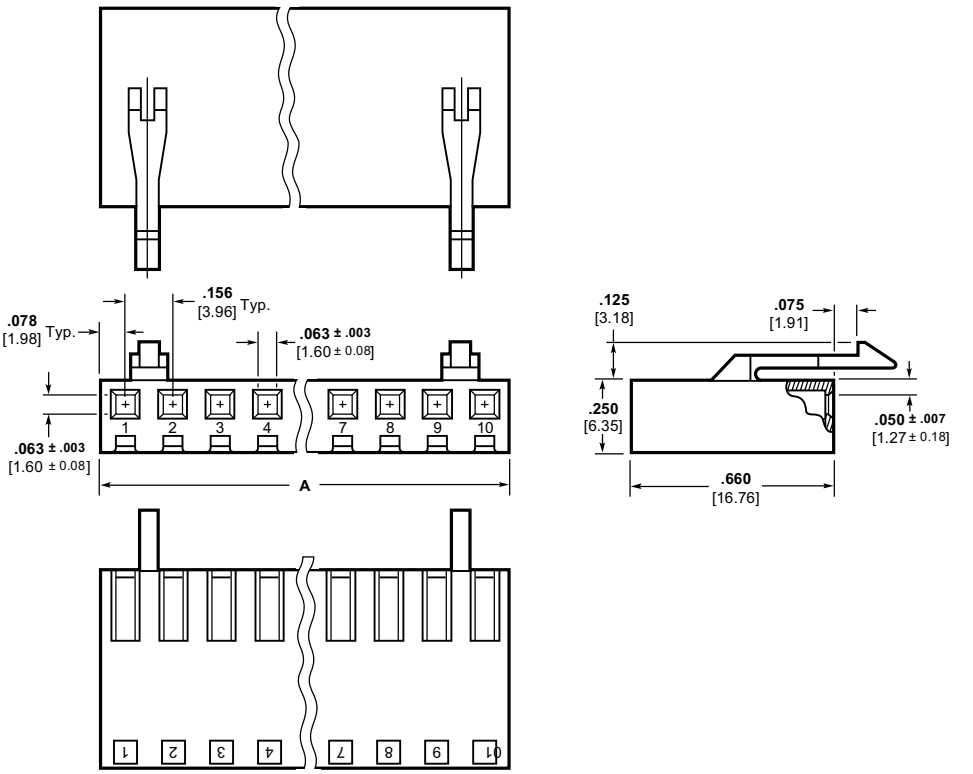
Printed Circuit Board Connectors (Continued)

SL-156 Housings With Through Board Latch

Housings

Material

UL94V-2 rated, type 6/6 nylon, white



No. of Pos.	Dim. A	Latch Location Centered Between Pos.	Part Number
6	.936 23.77	3 and 4	770894-6

AMP

Ribbon and Flexible Flat Cable Products

Table of Contents **Click Below**

Section Three: Ribbon and Flexible Flat Cable Products

AMP-LATCH Receptacle Connectors

AMP-LATCH Novo Receptacles

Feature — Dual Beam Phosphor Bronze Contacts with Gold-over-Nickel plating

Center and Military Polarization

Material and Finish

Housing, Cover & Strain Relief — Thermoplastic, 94V-0 rated, black

Contacts — Phosphor bronze, plated gold on mating end, bright tin-lead on termination end all over nickel under-plating

Ribbon and Flexible Flat Cable Products (Continued)

No. of Pos.	Strain Reliefs	.000030 [0.00076] Gold Plated	.000015 [0.00038] Gold Plated
10	499252-5	746288-1	746285-1
14	499252-9	746288-2	746285-2
16	499252-8	746288-3	746285-3
20	499252-2	746288-4	746285-4
24	1-499252-0	746288-5	746285-5
26	499252-3	746288-6	746285-6
30	1-499252-2	746288-7	746285-7
34	499252-6	746288-8	746285-8
40	499252-1	746288-9	746285-9
50	499252-4	1-746288-0	1-746285-0
60	499252-7	1-746288-1	1-746285-1
64	1-499252-3	1-746288-2	1-746285-2

AMP-LATCH Novo Connector with Center and Military Polarization

Military Polarization

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black

Contacts — Phosphor bronze, plated gold on mating end, bright tin-lead on termination end all over nickel under-plating

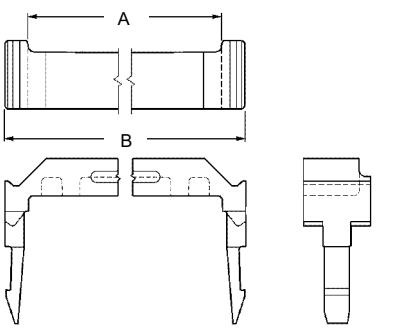
No. of Pos.	Strain Reliefs	.000030 [0.00076] Gold Plated	.000015 [0.00038] Gold Plated
10	499252-5	746290-1	499997-1
14	499252-9	746290-2	499997-2
16	499252-8	746290-3	499997-3
20	499252-2	746290-4	499997-4
24	1-499252-0	746290-5	499997-5
26	499252-3	746290-6	499997-6
30	1-499252-2	746290-7	499997-7
34	499252-6	746290-8	499997-8
40	499252-1	746290-9	499997-9
50	499252-4	1-746290-0	1-499997-0
60	499252-7	1-746290-1	—
64	1-499252-3	1-746290-2	—

AMP-LATCH Novo Connector with Military Polarization

Strain Relief for Novo Receptacles Material and Finish

Thermoplastic, 94V-0 rated, black

No. of Pos.	Dimensions A	Dimensions B	Strain Relief Part No.
10	**.520** 13.21	**.680** 17.27	499252-5
14	**.720** 18.29	**.880** 22.35	499252-9
16	**.820** 20.83	**.980** 24.89	499252-8
20	**1.020** 25.91	**1.180** 29.97	499252-2
24	**1.220** 30.99	**1.380** 35.05	1-499252-0
26	**1.320** 33.53	**1.480** 37.59	499252-3
30	**1.520** 38.61	**1.680** 42.67	1-499252-2
34	**1.720** 43.69	**1.880** 47.75	499252-6
40	**2.020** 51.31	**2.180** 55.37	499252-1
44	**2.220** 56.39	**2.380** 60.45	1-499252-1
50	**2.520** 64.01	**2.680** 68.07	499252-4
60	**3.020** 76.71	**3.180** 80.77	499252-7
64	**3.220** 81.79	**3.380** 85.85	1-499252-3



BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMP-LATCH Card Edge Connectors – Without Mounting Ears, With Split Single Beam Contacts

Material and Finish

Housing & Cover — Thermoplastic 94V-0 rated, black

Contacts — Phosphor bronze, duplex plated:

A. .000015 [0.00038] min. gold on mating end, .000100 - .000200 [0.00254 - 0.00508] bright tin-lead on termination end

B. Same as **A** with .000030 [0.00076] min. gold

No. of Pos.	Plating Code	Connectors (Pre-Assembled) Without Mounting Ears	Without Ears With Molded Key[1]
10	B	111109-8	–
16	B	1-111109-0	–
20	B	111109-6	–
30	A	111110-4	–
34	A	–	111112-3
40	B	111109-2	–
50	B	111109-1	–

[1]Intercontact keying plug is molded between positions 3,4, 5 and 6.

AMP-LATCH Card Edge Connector Without Mounting Ears

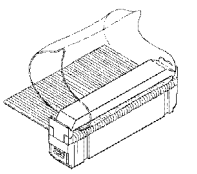
AMP-LATCH Ribbon Cable Connectors - Accessories

Pull Tabs, Permanent (for Receptacles and Pin Connectors)

Material —
Natural color PVC, 94-VTM-1 rating (thin material)

No. of Pos.	Part No.
–	88450-1
10	88450-2
14	88450-3
16	88450-4
20	88450-5
24	88450-6
26	88450-7
30	1-88450-2
34	88450-8
40	88450-9
50	1-88450-0
60	1-88450-1

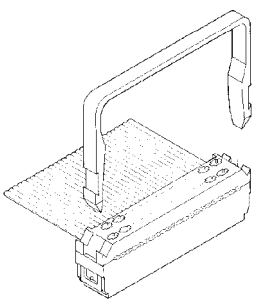
Note: This pull tab is installed manually between the cover and strain relief.



Pull Tabs, Snap-In (for Receptacles without Strain Relief)

50-Positions—Part No. 1-746601-1

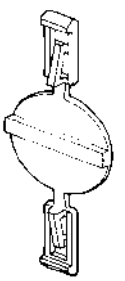
Material —
Thermoplastic, 94V-0-rated, black

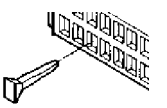


Polarizer, Snap-In (for Pin Connectors, Universal Pin and Pinless Headers and Low Profile Pin Headers

Part No. 499991-2
(Packaged 50 per bag)
Part No. 499991-3
(Packaged 1000 per box)

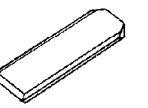
Material —
Thermoplastic, 94V-0 rated, black





Material:
Black Thermoplastic, 94V-0 rated

Keying Plug (for Novo Receptacles)
Part No. 499712-1
Alternate Configuration with 10 Keying Plugs Per Comb
Part No. 104072-1



Material:
Black Thermoplastic, 94V-0 rated

Keying Plug (forCard Edge Connectors)
Part No. 499712-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

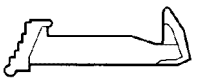
Universal I/O Pin Connectors without Mounting Ears

Material and Finish

Contacts —
A. Phosphor bronze, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Phosphor bronze, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

No. of Pos.	Plating Code	Part Number without Latches
10	B	111446-1
14	A	111445-2
20	B	111446-4
34	B	111446-8
50	A	1-111445-1
	B	1-111446-1



Latch
Part No. 111451-3

Universal I/O Pin Connectors with Slotted Mounting Ears

Material and Finish

Contacts —
A. Phosphor bronze, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

34-Positions Without Latches
Part No.111447-8

AMP-LATCH DIP Plugs, .100 x .100 [2.54 x 2.54]

Housing Assemblies with Cover (Pre-Assembled)

Material and Finish

Housing & Cover — Thermoplastic 94V-0 rated, black

Contacts — Phosphor bronze, plated .000100-.000200 [0.00254-0.00508] bright tin-lead over .000050 [0.00127] nickel on entire contact

No. of Pos.	Part No. (Pre-Assembled)
10[1]	746610-1
14	746610-2
16	746610-3
20	746610-4
24	746610-5
26	746610-6

[1]With Retention Legs - Part No. 111382-1

No. of Pos.	Part No. (Pre-Assembled)
30	746610-7
34	746610-8
40	746610-9
50	1-746610-0
60	1-746610-1
64	1-746610-2

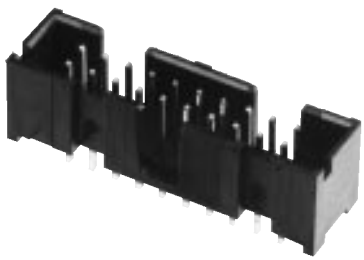
DIP Plug with Cover Pre-Assembled

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Low Profile Headers–Shrouded, .100 [2.54] End Dimension, .100 x .100 [2.54 x 2.54] Centers

Double Row .025 [0.64] Square Straight Post

No. of Pos	Part Numbers	
	Plating A	Plating B
10	103308-1	103309-1
14	103308-2	103309-2
16	103308-3	103309-3
20	103308-5	103309-5
26	103308-6	103309-6
34	103308-7	103309-7
40	103308-8	103309-8
50	1-103308-0	1-103309-0
60	–	1-103309-2



Material and Finish

Housing — Thermoplastic 94V-0 rated, black

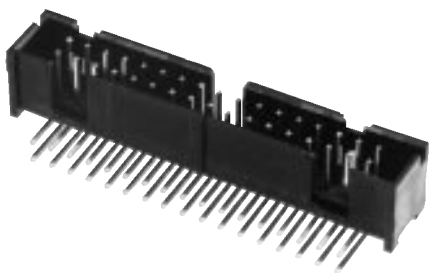
Contacts —

A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

Double Row .025 [0.64] Square Right-Angle Post

No. of Pos	Part Numbers	
	Plating A	Plating B
10	103310-1	103311-1
14	103310-2	103311-2
16	103310-3	103311-3
20	103310-5	103311-5
26	103310-6	103311-6
34	103310-7	103311-7
40	103310-8	–
50	1-103310-0	1-103311-0



Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Contacts —

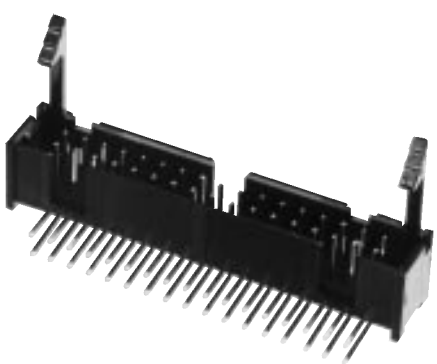
A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

Double Row with Ejection Latches, .025 [0.64] Square Right-Angle Post

No. of Pos.	Part Numbers	
	Latching Height .585 [14.9][1]	Latching Height .435 [11.0][2]
10	104130-1	104315-1
14	104130-2	–
16	104130-3	–
20	104130-4	–
26	104130-5	104315-5
34	104130-6	–
40	104130-7	–
50	104130-9	104315-9

[1]To be used when mating to receptacle with strain relief.
[2]To be used when mating to a receptacle without strain relief.



Material and Finish

Housing and Latches — Thermoplastic 94V-0 rated, black

Contacts — Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Low Profile Headers–Shrouded, .100 [2.54] End Dimension, .100 x .100 [2.54 x 2.54] Centers

Double Row with Ejection Latches, .025 [0.64] Square Straight Post

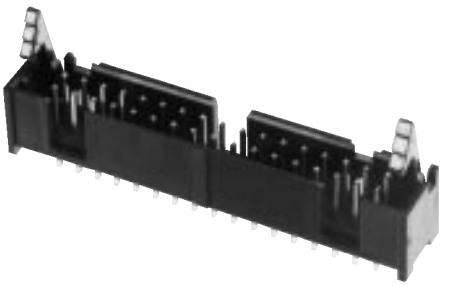
Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Contacts — Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

No. of Pos.	Part Numbers	
	Latching Height .585 [14.9][1]	Latching Height .435 [11.0][2]
10	104128-1	104313-1
14	104128-2	104313-2
16	104128-3	104313-3
20	104128-4	104313-4
26	104128-5	104313-5
34	104128-6	–
40	104128-7	104313-7
50	104128-9	104313-9
60	1-104128-0	–

[1]To be used when mating to receptacle with strain relief.
[2]To be used when mating to a receptacle without strain relief.



High Temperature Double Row, .025 [0.64] Square Right-Angle Post with Board Retention

Material and Finish

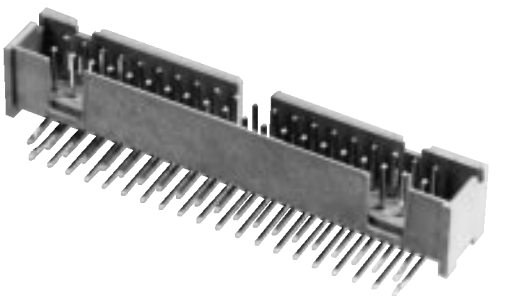
Housing — Thermoplastic 94V-0 rated, black

Contacts —

A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

No. of Pos	Part Numbers	
	Plating A	Plating B
10	104340-1	–
14	104340-2	104341-2
24	–	104341-5
26	–	104341-6
50	104340-9	104341-9



High Temperature Double Row, .025 [0.64] Square Straight Post with Board Retention

Material and Finish

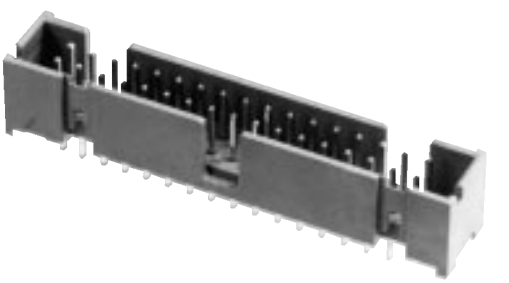
Housing — Thermoplastic 94V-0 rated, black

Contacts —

A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

No. of Pos	Part Numbers	
	Plating A	Plating B
10	104338-1	104339-1
14	104338-2	104339-2
16	104338-3	–
20	104338-4	–
24	104338-5	–
26	–	104339-6
34	104338-7	–
40	104338-8	104339-8
50	104338-9	–



BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

AMP-LATCH Connectors

Ribbon and Flexible Flat Cable Products (Continued)

Universal Ejection Style Pin Headers, .100 x .100 [2.54 x 2.54] Centers

Military, Center and Dual Polarized, Straight-Thru, 4-Sided, .025 [0.64] Square Post

Material and Finish

Housing & Latches — Thermoplastic 94V-0 rated, black

Contacts —

A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

Pin Header with Latches

Pin Header without Latches

No. of Pos.	Post Length Code	Pin Header Part Number		Pin Header Kit Number with Latches			
				Latch Part No. 102312-1[1]		Latch Part No. 102320-1[2]	
		Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
10	1	102153-1	102154-1	499910-1	499160-1	499922-1	499206-1
	2	102155-1	–	–	499374-1	499923-1	102321-1
14	1	102153-2	102154-2	499910-2	499910-2	499922-2	499206-2
	2	–	102156-2	–	–	–	102321-2
16	1	102153-3	102154-3	499910-3	499160-3	499922-3	499206-3
	2	102155-3	102156-3	–	–	499923-3	102321-3
20	1	102153-4	102154-4	499910-4	–	499922-4	499206-4
	2	102155-4	102156-4	–	–	499923-4	102321-4
24	1	102153-5	102154-5	499910-5	–	499922-5	499206-5
	2	102155-5	–	–	–	–	102321-5
26	1	102153-6	102154-6	499910-6	–	499922-6	499206-6
	2	102155-6	102156-6	–	499374-6	499923-6	102321-6
30	1	102153-7	102154-7	–	499160-7	–	499206-7
	2	–	–	–	–	499923-7	–
34	1	102153-8	102154-8	499910-8	499160-8	499922-8	499206-8
	2	102155-8	102156-8	–	–	499923-8	102321-8
40	1	102153-9	102154-9	499910-9	499160-9	499922-9	499206-9
	2	102155-9	102156-9	–	499374-9	499923-9	102321-9
50	1	1-102153-0	1-102154-0	1-499910-0	1-499160-0	1-499922-0	1-499206-0
	2	1-102155-0	1-102156-0	–	–	1-499923-0	1-102321-0
60	1	1-102153-1	1-102154-1	–	–	1-499922-1	1-499206-1
64	1	1-102153-2	1-102154-2	–	–	–	–
	2	1-102155-2	1-102156-2	–	–	1-499923-2	1-102321-2

[1]Mates with AMP-LATCH receptacles without strain relief.
[2]Mates with AMP-LATCH receptacles with strain relief.

ACTION PIN Contacts, Military, Center and Dual Polarized, Straight-Thru, 4-Sided, .025 [0.64] Square Post

Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Contacts —

A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

No. of Pos.	Part Numbers	
	Plating A	Plating B
10	499984-1	499582-1
14	499984-2	499582-2
16	499984-3	499582-3
20	499984-4	499582-4
24	499984-5	499582-5
26	499984-6	499582-6
30	499984-7	–
34	499984-8	499582-8
40	499984-9	499582-9
50	1-499984-0	1-499582-0
60	–	1-499582-1
64	–	1-499582-2

Pin Header without Latches Post Length .174 [4.42] for .093-.125 [2.36-3.18] Thick PC Board

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal Ejection Style Pin Headers, .100 x .100 [2.54 x 2.54] Centers

Military, Center and Dual Polarized, Right-Angle, 4-Sided, .025 [0.64] Square Post

Material and Finish

Housing & Latches — Thermoplastic 94V-0 rated, black

Contacts —

A. Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

B. Copper alloy, duplex plated .000030 [0.00076] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

Pin Header with Latches

Pin Header without Latches

No. of Pos.	Post Length Code	Pin Header Part Number		Pin Header Kit Number with Latches			
				Latch Part No. 102312-1[1]		Latch Part No. 102320-1[2]	
		Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
10	1	102159-1	102161-1	499913-1	–	499786-1	–
	2	102160-1	102162-1	–	–	499141-1	102322-1
14	1	102159-2	–	–	–	–	–
	2	102160-2	–	–	–	499141-1	102322-2
16	1	102159-3	–	499913-3	–	499786-3	–
	2	102160-3	–	–	–	499141-3	–
20	1	102159-4	–	–	–	499786-4	–
	2	102160-4	–	–	–	499141-4	102322-4
24	2	102160-5	–	–	–	–	–
26	1	102159-6	102161-6	499913-6	–	499786-6	–
	2	102160-6	102162-6	–	–	499141-6	102322-6
30	1	102159-7	–	–	–	–	–
	2	102160-7	–	–	–	–	–
34	1	102159-8	–	–	–	499786-8	–
	2	102160-8	–	–	–	499141-8	–
40	1	102159-9	–	499913-9	–	499786-9	–
	2	102160-9	102162-9	499345-9	–	499141-9	–
50	1	1-102159-0	1-102161-0	1-499913-0	–	1-499786-0	–
	2	1-102160-0	1-102162-0	–	–	1-499141-0	1-102322-0
60	1	1-102159-1	–	–	–	–	–
64	1	1-102159-2	–	–	–	1-499786-2	–
	2	1-102160-2	–	–	–	1-499141-2	–

[1]Mates with AMP-LATCH receptacles without strain relief.
[2]Mates with AMP-LATCH receptacles with strain relief.

Center and Military Polarized, Right-Angle, 3-Sided, .025 [0.64] Square Post

Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Contacts — Copper alloy, duplex plated .000015 [0.00038] gold on pin end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end all over nickel underplating with .000050 [0.00127] nickel

Pin Header without Latches
Post Length .110 [2.79]
10 Positions
Part No. 746101-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal Ejection Style Pin Headers, .100 x .100 [2.54 x 2.54] Centers

High Temperature, Thru-Hole (SMT Compatible) .025 [0.64] Square Post — Straight-Thru

Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Contacts — Phosphor bronze or brass (option of AMP), duplex plated .000030 [0.00076] gold on pin end, .000150 [0.0038] matte tin-lead on solder tail, all over underplated with .000050 [0.00127] nickel

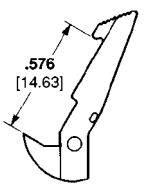
No. of Pos.	Straight-Thru Part Number
14	111008-2
24	111008-5
50	1-111008-0

Straight-Thru Pin Header

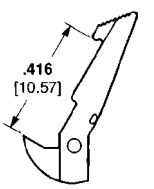
Latches for Ejection Style Pin Headers and Pinless Headers

Material

Latch — Thermoplastic 94V-0 rated, black



Latch
Part No. 102320-1
(without Push Tabs)



Latch
Part No. 102312-1
(without Push Tabs)

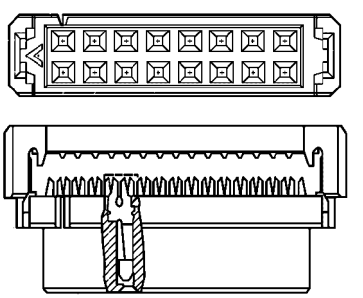
2.0mm [.079] Receptacle Connectors, Non-Polarized and Center Polarizing Bar

Material and Finish

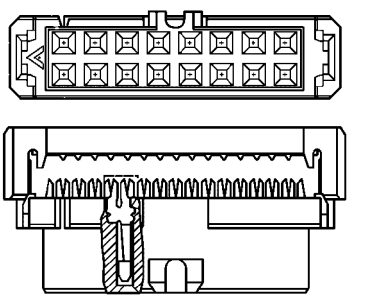
Housing and Termination Cover — Thermoplastic 94V-0 rated, black

Contacts — Beryllium copper, duplex plated 0.00076 [.000030] gold on mating end, 0.00254 [.000100] min. tin-lead on termination end, all over nickel underplated with 0.00127 [.000050] nickel

Note: Accepts 0.08-0.09mm² [28 AWG] ribbon cable, 0.61-0.97 [.024-.038] thk. PVC 1.00 [.039] pitch



Non-Polarized



Polarized

No. of Pos.	Part Numbers	
	Feed-Thru Cover Polarized	Feed-Thru Cover Non-Polarized
8	–	1-111626-6
12	1-111623-7	–
14	111623-2	–
20	111623-4	111626-4
26	111623-6	–
40	–	111626-9
44	1-111623-0	1-111626-0
50	–	1-111626-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

.039 [1.00] Centerline, Flat Ribbon Cable, PVC Insulation, 28 AWG Stranded 7/36 Tinned Copper

Electrical Ratings

Voltage — 150 Volts

Impedance — 80 Ohms

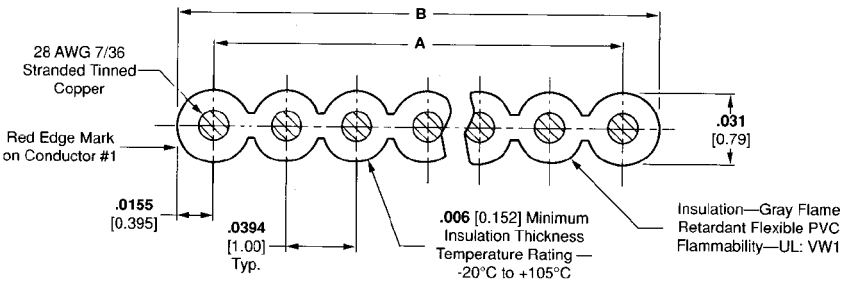
Capacitance — 18.3 pf/ft at 1 MHz

Propagation Delay — 1.47 ns/ft nom.

Insulation Resistance — 10^{10} Ohms/10 ft [3.048m]

Crosstalk — 10 ft sample, 5 ns rise time with 2 lines driven,
Near end - 4.0% max.
Far end - 6.0% max.

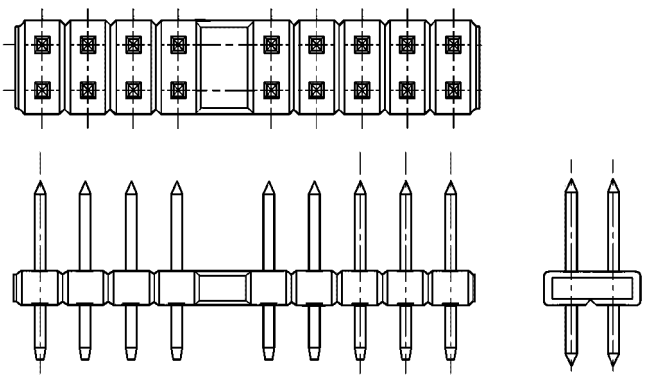
Cable Surface — Printed with UL and CSA requirements



No. of Conductors	Dimensions A	Dimensions B	Part Numbers 100 ft. [30.5 m] Reel	Part Numbers 500 ft. [152.4 m] Reel
44	**1.693** 43.00	**1.724** 43.79	2-57051-8	1-57051-2
50	**1.929** 49.00	**1.960** 49.79	2-57051-9	1-57051-3

Breakaway Headers, Unshrouded, Double Row, Thru-Hole Mount, 0.5 [.02] Square Straight Posted Contacts

50 Positions
Lead Length 2.6 [.10]
Part No. 4-176264-8



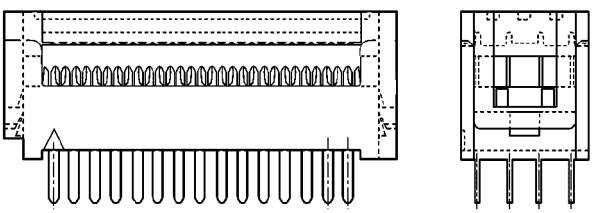
Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Contacts — Brass , duplex plated 0.00076 [.000030] gold on contact area, 0.0038 [.000150] min. tin-lead on solder area, all over underplated with 0.00130 [.000051] nickel

System 50 Cable-to-Board Connectors, .025 [0.64] Centerline, Paddleboard Receptacle

68 Positions
Kinked Legs
Part No. 1-111595-9



Material and Finish

Housing — LPC thermoplastic, 94V-0 rated, black

Contacts — Copper alloy plated .000100-.000200 [0.00254-0.00508] bright tin-lead over .000050-.000100 [0.00127-0.00254] nickel underplating

Ribbon and Flexible Flat Cable Products (Continued)

System 50 Cable-to-Board Ribbon Cable Connectors, .025 [064] Centerline Cable

Double Row Receptacles

No. of Pos.	Part Number
10	111196-1
20	111196-4
24	111196-5
26	111196-6
30	111196-7
40	111196-9

No. of Pos.	Part Number
50	1-111196-1
60	1-111196-2
68	1-111196-7
80	1-111196-5
100	1-111196-6

AMP-LATCH System 50 Cable-to-Board Connector

Material and Finish

Housing — Thermoplastic 94V-0 rated, black

Latches — Stainless Steel

Contacts — Beryllium copper, plated gold-over-nickel on mating end, tin-lead on termination end

.025 [0.63] Centerline IDC Ribbon Cable, PVC Insulation, 30 AWG Solid Bare Copper and 32 AWG Stranded Tinned Copper

Electrical Ratings

Voltage — 150 Volts

Impedance — 80 Ohms (GND, SIG, GND)

Capacitance — 19.2 pf/ft at 1 MHz

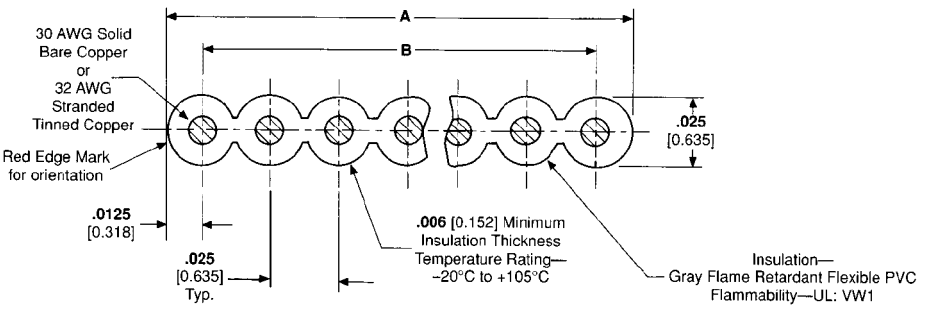
Propagation Delay — 1.51 ns/ft nom.

Insulation Resistance — 10^{10} Ohms/10 ft [3.048m]

Crosstalk — 10 ft sample, 5 ns rise time,

Near end - 4.0% max.
Far end - 6.0% max.

Cable Surface — Printed with UL and CSA requirements



No. of Conductors	Dimensions A	Dimensions B	Part Numbers 30 AWG Solid Bare 100 ft. [30.5m]	Part Numbers 30 AWG Solid Bare 500 ft. [152.4m]	Part Numbers 32 AWG 7/40 Stranded 100 ft. [30.5m]
20	**.475** 12.07	**.500** 12.70	1-57013-3	–	–
24	**.575** 14.61	**.600** 15.24	1-57013-4	–	–
30	**.725** 18.42	**.750** 19.05	1-57013-5	–	–
40	**.975** 24.77	**1.000** 24.40	1-57013-7	–	–
50	**1.225** 27.94	**1.250** 31.75	1-57013-9	–	–
60	**1.475** 37.47	**1.500** 38.10	–	–	2-57038-0
68	**1.675** 42.55	**1.700** 43.18	3-57013-1	1-57013-1	–
80	**1.975** 50.17	**2.000** 50.80	2-57013-3	–	–
100	**2.475** 62.87	**2.500** 63.50	2-57013-4	–	–

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Ribbon and Flexible Flat Cable Products (Continued)

.025 [0.63] Centerline IDC Ribbon Cable, PVC Insulation, 30 AWG Stranded Tinned Copper

Electrical Ratings

Voltage — 150 Volts

Impedance — 66 Ohms (GND, SIG, GND)

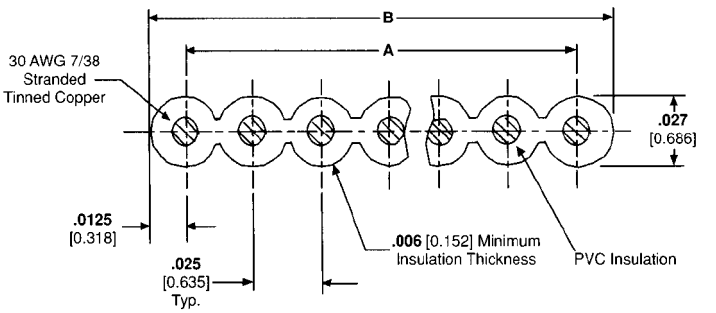
Capacitance — 23 pf/ft at 1 KHz

Propagation Delay — 1.55 ns/ft nom.

Insulation Resistance — $>10x10^{10}$ Ohms/10 ft [3.048m]

Crosstalk — 10 ft sample, 5 ns rise time,
Near end - 2.8% max.
Far end - 4.5% max.

Cable Surface — Printed with UL and CSA requirements



No. of Conductors	Dimensions A	Dimensions B	Part Numbers 100 ft. [30.5 m] Reel	Part Numbers 500 ft. [152.4 m] Reel
68	**1.675** 42.55	**1.700** 43.18	–	1-57131-1
80	**1.975** 50.17	**2.000** 50.80	2-57131-3	–

AMPLIMITE HDF-20 Low Profile Metal Shell Receptacle Assemblies (For Round Conductor Flat Ribbon Cable)

Material and Finish

Front Shell — Steel, tin plated

Housing, Cover & Cable Stabilizer — Thermoplastic 94V-0 rated, black

Socket Contacts — Phosphor bronze, duplex plated .000030 [0.00076] gold on mating end, .000100-.000200 [0.00254-0.00508] bright tin-lead on termination end, all over underplating with .000050 [0.00127] nickel

No. of Pos.	Shell Size	Part Numbers with Standard Mounting Holes	Part Numbers with Threaded Inserts
15	2	–	747052-3
25	3	747303-2	–
37	4	747303-1	747052-1

ECONOLATCH Center and Military Polarization Connectors

40-Position IDC Receptacle Assembly Part No. 111918-9

Material & Cover — Thermoplastic, 94V-0 rated, black

Contacts — Phosphor bronze, duplex plated .000015 [0.00038] min. gold on mating end, .000100 [0.00254] min. tin-lead on termination end, entire contact underplated .000050 [0.00127] min. nickel

ECONOLATCH Receptacle Assembly

.050 [1.27] Centerline, Flat Ribbon Cable, PVC Insulation, 28 AWG Stranded Tinned Copper

Electrical Ratings

Voltage — 300 Volts

Impedance — 105 ohms nom. (GND, SIG, GND)

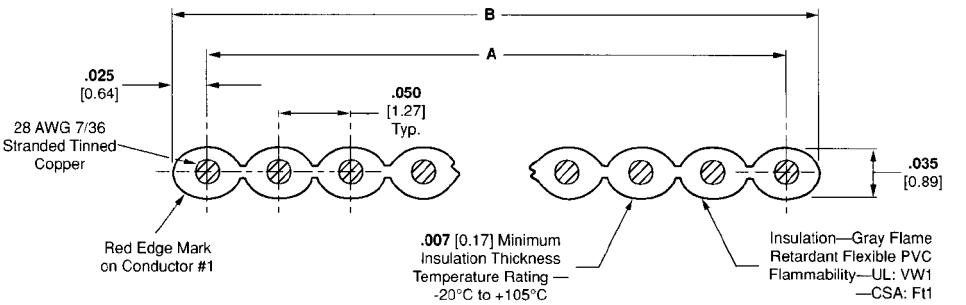
Capacitance — 15 pf/ft at 1 MHz

Propagation Delay — 1.41 ns/ft nom.

Insulation Resistance — 10,000 Megohms/10 ft [3.048m]

Crosstalk — 10 ft sample, 5 ns rise time with 2 lines driven,
Near end - 4.0% max.
Far end - 6.0% max.

Cable Surface — Printed with UL and CSA requirements



No. of Conductors	Dimensions A	Dimensions B	Part Numbers 100 ft. [30.5 m] Reel	Part Numbers 500 ft. [152.4 m] Reel
9	.400 10.16	.450 11.43	1-57040-2	1-971111-2
10	.450 11.43	.500 12.70	1-57040-3	1-971111-3
14	.650 16.51	.700 17.78	1-57040-4	1-971111-4
15	.700 17.78	.750 19.05	1-57040-5	–
16	.750 19.05	.800 20.32	1-57040-6	1-971111-6
20	.950 24.13	1.000 25.40	57040-1	971111-1
24	1.150 29.21	1.200 30.48	1-57040-1	1-971111-1
25	1.200 30.48	1.250 31.75	57040-2	971111-2
26	1.250 31.75	1.300 33.02	57040-3	971111-3
28	1.350 34.29	1.400 35.56	57040-8	–
30	1.450 36.83	1.500 38.10	2-57040-1	–
34	1.650 41.91	1.700 43.18	57040-4	971111-4
36	1.750 44.45	1.800 45.72	–	2-971111-5
40	1.950 49.53	2.000 50.80	57040-5	971111-5
44	2.150 54.61	2.200 55.88	2-57040-4	–
50	2.450 62.23	2.500 63.50	57040-6	971111-6
60	2.950 74.93	3.000 76.20	57040-7	971111-7
64	3.150 80.01	3.200 81.28	2-57040-2	2-971111-2

CHAMP Miniature Ribbon Connectors

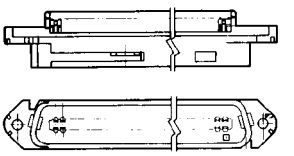
CHAMP IDC Connectors

Material and Finish

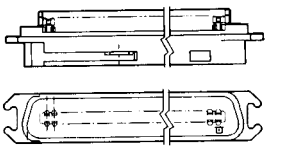
Housing — Self-Extinguishing plastic
Contacts — Copper alloy, plated .000030 [0.00076] gold on contact area, all over .000050 [0.00127] nickel underplate

Color Code	Letter Code	Wire Range (AWG)
Blue	B	(1) 24-26 Solid or 24 Stranded
Green	C	(1) 22 Solid or Stranded
Yellow	E	(1) 26, 27 or 28 Stranded

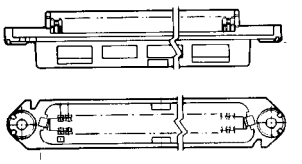
Style PS — Plug, Screw Lock, Thick Flange



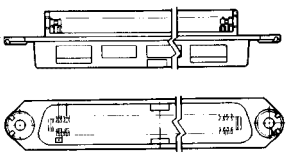
Style PB — Plug, Bail Lock



StyleRS — Receptacle, Screw or Bail Lock, Thick Flange



Style RS — Receptacle, Panel Mount, Screw or Bail Lock, Thin Flange



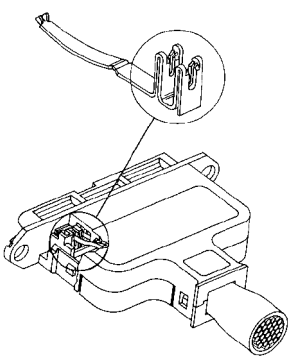
No. of Pos.	Wire Size[1] Solid AWG/ mm	Wire Size[1] 7-Strand AWG/ mm²	Housing Color Dot	Part Numbers Plug Style PS	Part Numbers Plug Style PB	Part Numbers Receptacle Style RS	Part Numbers Receptacle Style RP
14	22 0.65	22 0.40	Green	552300-1	–	–	–
24				552301-1	552317-1	–	–
50				552173-1	552319-1	552064-1	–
64				552303-1	–	552307-1	–
14	24-26 0.51-0.40	24 0.20	Blue	552282-1	552270-1	552312-1	2-552271-1
24				552283-1	552272-1	552313-1	–
36				552284-1	552274-1	552314-1	2-552275-1
50				229974-1	552032-1	229975-1	2-552001-1
64				552285-1	552276-1	552315-1	2-552277-1
24	–	26-27-28 0.14, 0.10, 0.09	Yellow	–	–	–	2-552474-1
36				–	552470-1	–	–
50				552390-1	552471-1	552391-1	2-552476-1
64				552488-1	–	–	–

[1]Insulation Diameter .045 [1.14] depending on type of insulation and appliator tool.

CHAMP Large Insulation Wire Connectors

Material and Finish

Housing — Self-Extinguishing plastic
Contacts — Copper alloy, plated .000030 [0.00076] gold on contact area, all over .000050 [0.00127] nickel underplate



No. of Pos.	Wire Size[1] Solid AWG/ mm	Wire Size[1] 7-Strand AWG/ mm²	Housing Color	Part Numbers Plug Style PS	Part Numbers Plug Style PB	Part Numbers Receptacle Style RS	Part Numbers Receptacle Style RP
36	22 0.64	22 0.40	Brown	–	–	5-555037-1	–
50				556039-1	–	555227-1	–
64				556409-1	555753-1	–	555151-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

CHAMP Miniature Ribbon Connectors

Ribbon and Flexible Flat Cable Products (Continued)

Integral Locking Latch Receptacle

Material and Finish

Housing — Self-Extinguishing plastic
Contacts — Copper alloy, plated .000030 [0.00076] gold on contact area, all over .000050 [0.00127] nickel underplate

No. of Pos.	Housing Color Dot	Contact Letter Code[1]	Part Number
50	Blue	B	553921-1
64	Blue	B	554381-2

[1]See previous page for letter code information.

Cable-to-Cable Applications

Cable-to-Cable Plug and Receptacle with Tapered Cover and Screw

Material and Finish

Housing — Self-Extinguishing plastic
Contacts — Copper alloy, plated .000030 [0.00076] gold on contact area, all over .000050 [0.00127] nickel underplate

Cable-to-Cable Hardware Kit (for use with 90° Strain Relief Cover - 1 kit required per assembly) Part No. 552561-4

Cable Diameter Range	Contact Letter Code[1]	Dust Cover	Part Numbers		
			Plug		Receptacle
			Black	Gray	Black
Up to **.550** 13.97	C	No	552382-1	–	552383-1
.350-.425 8.89-10.80	B	No	6-229912-1[2]	–	6-229913-1[2]
		Yes	1-229912-1	1-229912-4	1-229913-1
		Yes	6-229912-3[2]	–	6-229913-3[2]
.425-.500 10.80-12.70	B	No	2-229912-1	–	2-229913-1
.350-.425 8.26-10.80	E	No	552402-1	–	552403-1

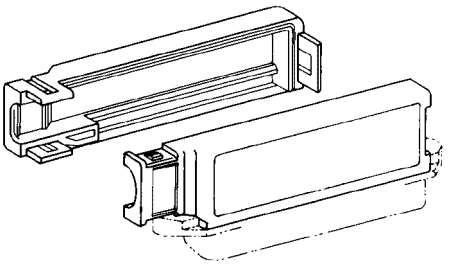
[1]See previous page for letter code information.
[2]These part numbers are bulk packed in quantities of 500.

Cable-to-Cable Accessories — Dust Cover

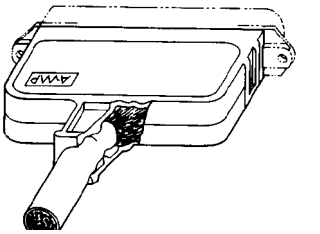
No. of Pos.	Part Numbers	
	Plug Cover (Blue)	Receptacle Cover (Red)
24	229968-4	229969-4
36	229968-3	229969-3
50	229968-1	229969-1
64	229968-2	229969-2

Ribbon and Flexible Flat Cable Products (Continued)

Cable-to-Cable Accessories — Snap-On Strain Relief Covers



90° Snap-On Strain Relief Cover

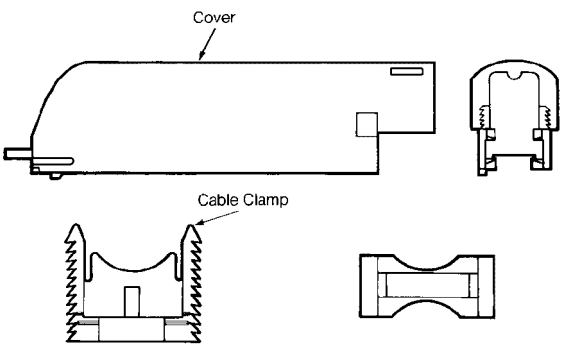


180° Snap-On Strain Relief Cover

No. of Pos.	Cable Range Diameter	90° Part Number
14	.185-.230 4.70-5.84	552412-1
	.250-.300 6.35-7.62	1-552412-1
24	.250-.300 6.35-7.62	552413-1
	.305-.360 7.75-9.14	1-552413-1
36	.305-.360 7.75-9.14	552414-1
	.330-.380 8.38-9.65	3-552414-1
50	.315-.415 8.00-10.54	1-552011-1
	.415-.465 10.54-11.81	552011-1
64	.410-.475 10.41-12.07	552496-1
	.475-.540 12.07-13.72	1-552496-1
	.540-.605 13.72-.605	2-552496-1

No. of Pos.	Cable Range Diameter	180° Part Number
14	.175-.220 4.45-5.59	552079-1
	.265-.310 6.73-7.87	2-552079-1
24	.230-.280 5.84-7.11	552076-1
	.280-.320 7.11-8.13	1-552076-1
	.320-.380 8.13-9.65	2-552076-1
36	.290-.360 7.37-9.14	552073-1
	.360-.430 9.14-10.92	552073-5
	.430-.500 10.92-12.70	552073-6
50	.330-.380 9.38-9.65	3-552008-1
	.380-.430 9.65-10.92	2-552008-1
	.430-.490 10.92-12.45	552008-1
	.480-.550 12.19-13.97	4-552008-1
	.430-.500 10.92-12.70	552003-1
64	.480-.540 12.19-12.70	552082-1
	.540-.610 13.72-15.49	1-552496-1

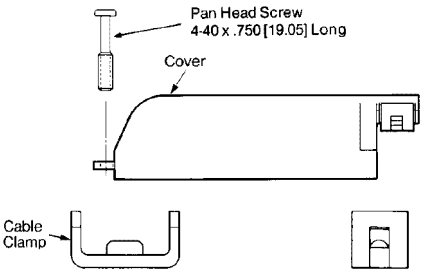
Cable-to-Cable Accessories — 90° Standard Slide-On Strain Relief Cover and Adjustable Cable Clamp for 50 Position CHAMP-LOK or Screw Lock Hardware, Cable Dia. .425 [10.80] Max.



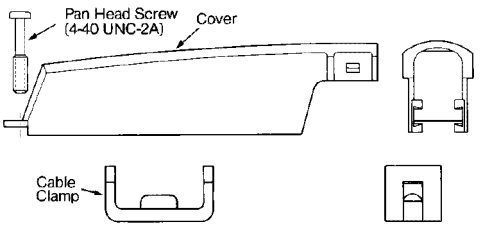
Cover Part No. 552760-1
Cable Clamp Part No. 552763-1
Color Black

Ribbon and Flexible Flat Cable Products (Continued)

Cable-to-Cable Accessories — 90° Standard and Tapered Slide-On Strain Relief Cover Kit for 50 Position Connectors



90° Standard Slide-On Strain Relief Cover Kit



90° Tapered Slide-On Strain Relief Cover Kit

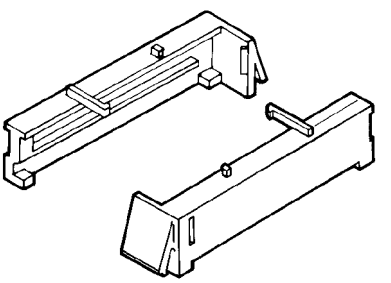
Cable Range Diameter	Kit Part Numbers		Component Part Numbers			
	Standard Cover	Tapered Cover	Cable Clamp	Screw	90° Tapered Cover	90° Slide-On Cover
.425-.500 10.80-12.70	552960-1	552560-5	1-229910-1	229911-1	229909-1	552617-1
.350-.425 8.89-10.80	552960-2	—	229910-1	229911-1	229909-1	—
.325-.370 8.26-9.40	—	—	—	229911-1	229909-1	—
.300-.325 7.62-8.26	—	—	—	229911-1	229909-1	—
.500-.550 12.70-13.97	552960-5	—	4-229910-1	229911-1	229909-1	—

Cable-to-Panel Snap-On Strain Relief

No. of Positions	Low Profile Part Number
14	1-552299-1
50	1-552027-1
64	1-552296-1

Cable-to-Panel Snap-In Panel Mount Strain Relief — 50 Position for .090 [2.29] Panel Thickness (No additional hardware required)

Part No. 552962-3 (Black)

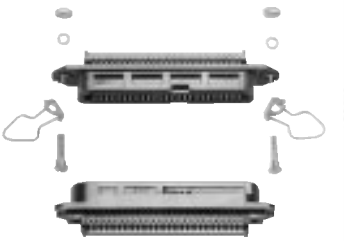


CHAMP Miniature Ribbon Connectors

Ribbon and Flexible Flat Cable Products (Continued)

Cable-to-Panel Hardware Kits (One kit required per assembly)

Screw Lock Hardware Kit For Rear Panel Mount Applications Part No. 552568-1



Bail Lock Hardware Kit Part No. 552567-1

Bent Bail Lock Hardware Kit For 90° Strain Relief Cover Part No. 552567-2

Shielded Cable Connector Kits

Material and Finish:

Housing and Cover—Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy

Shield—Bright nickel plated carbon steel

Strain Relief—Flame retardant NYLON, black

Ferrule—Copper alloy

Hardware—Zinc plated steel

Specifications:

Insulation Diameter— .045 [1.14] max.

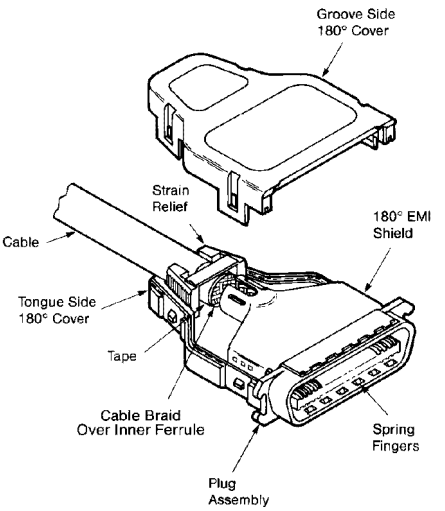
Terminal Center-to-Center Spacing—.085 [2.16]

Slot Designation stamped on contacts which are preloaded in housing.

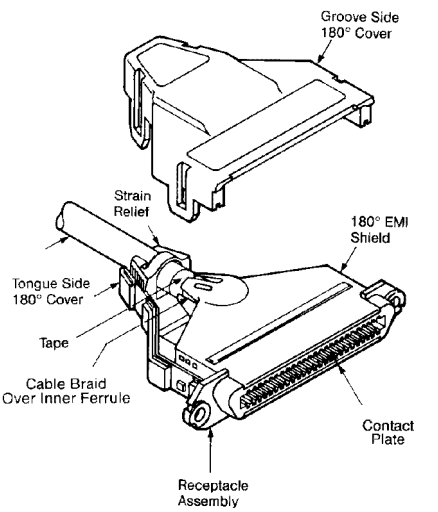
B-Slot—24 AWG [0.51] mm] and 26 AWG [0.40 mm] (solid) or 24 AWG [0.20 mm²] (7 strand)

E-Slot—26-27-28 AWG [0.12-0.10-0.09 mm²] (7 strand) wire

Note: Connector kits shipped unassembled.



Plug Connector Kit



Receptacle Connector Kit

Inner Ferrule

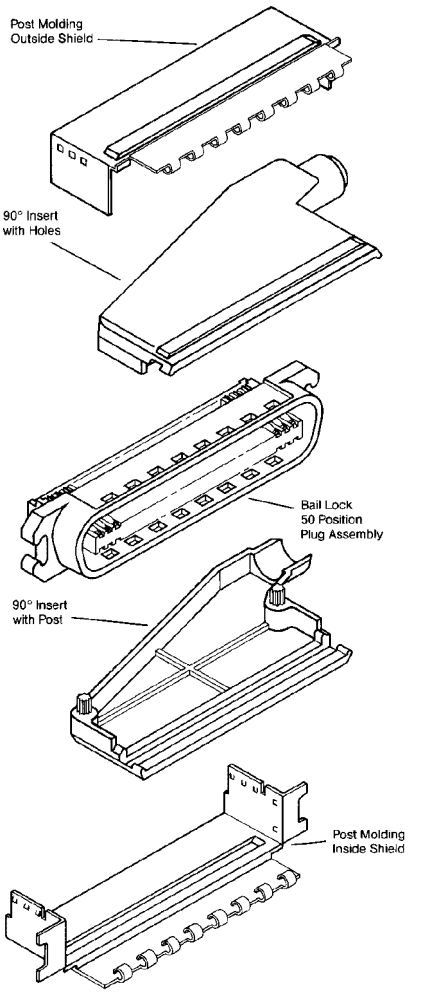
Inside Diameter	Inner Ferrule Part Number
.450 11.43	554725-5
.500 12.7	554725-6

No. of Positions	Cable Range	Part Numbers						
		Shielded Plug Kit				Shielded Receptacle Kit		
		Screw Lock		Bail Lock		Screw or Bail Lock		Cover Kits
		B Slot	E Slot	B Slot	E Slot	B Slot	E Slot	
24	**.250-.500** 6.35-12.70	554948-4[5]	554948-3[4]	—	—	—	—	554944-1
36	**.250-.500** 6.35-12.70	554951-2	—	554950-2	554950-1	—	—	554945-1
50	**.350-.625** 8.89-15.88	—	554954-1	554953-2[1]	554953-1[1]	554955-2[2]	554955-1[2]	554946-1[3] 554946-2

[1]SCSI applicable.
[2]SCSI applicable with Hardware Kit Part Number 552561-6.
[3]For cable diameter of .500 [12.70] or less use -1 kit. For cable diameter greater than .500 [12.70] use -2 kit.
[4]Connector with M3.5 threads kits includes M3.5 x 2.00 [50.80] standoff stud.
[5]M3.5 x 0.6-6G, shoulder stud screws (2) supplied.

Shielded Cable Connector Kits (Continued)
50 Position Plug Kit, 90° Cable Exit for Post Molding Operation

7- Strand, 26-27-28 AWG [0.14, 0.10, 0.09 mm²]
Part No. 5-555012-2 (Gray)



Shielded CHAMP Latch Panel Mount Connectors for .050 [1.27] Ribbon Cable

Material and Finish:

Housing and Strain Relief Clip— Thermoplastic (black)

Terminals—Gold over nickel plated high strength copper alloy on mating face and gold flash over nickel plate on terminating side

EMI Shield—Nickel plated die casting

No. of Pos.	Loose Piece Part Numbers	Preassembled Part Numbers		
		Bail Lock 4-40	Screw Lock 6-32	Screw Lock 4-40
24	554349-1[4]	—	554434-1[4]	—
36	554348-1	559983-1[1]	—	—
50	554350-1	554902-1[1,3]		554436-2[2,3]

[1]Does not have boss feature. Boss is a .040 [1.02] shoulder on front of shield.
[2]SCSI applicable with Bail Lock Hardware Kit **Part Number 554818-2**.
[3]SCSI applicable.
[4]Can be used with Interface Bus Applications per IEEE-488.

CHAMP Miniature Ribbon Connectors

Ribbon and Flexible Flat Cable Products (Continued)

Shielded CHAMP Latch Panel Mount Connectors Hardware Kits — Loose Piece Shield

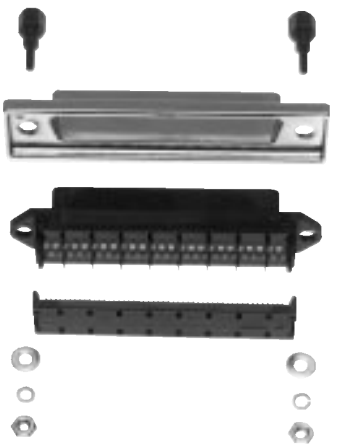
Material and Finish:

Mounting Stud—Bright zinc plated carbon steel

Pan Head Screw—Passivated stainless steel

Metric Standoff Stud—Black oxide coated carbon steel

Metric Screw Lock Hardware Kit For IEEE-488 Applications
Front Panel Mount Part No. 553636-2
Rear Panel Mount Part No. 553636-3



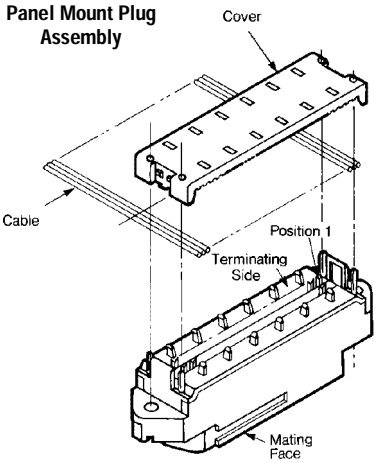
Standard CHAMP Latch Low Profile Connectors

Material and Finish:

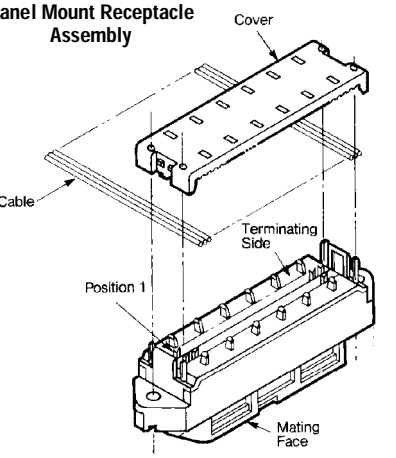
Housing and Covers—Thermoplastic (black)

Terminals—Gold over nickel plated high strength copper alloy on mating face and gold flash over nickel plate on terminating side

Panel Mount Plug Assembly



Panel Mount Receptacle Assembly



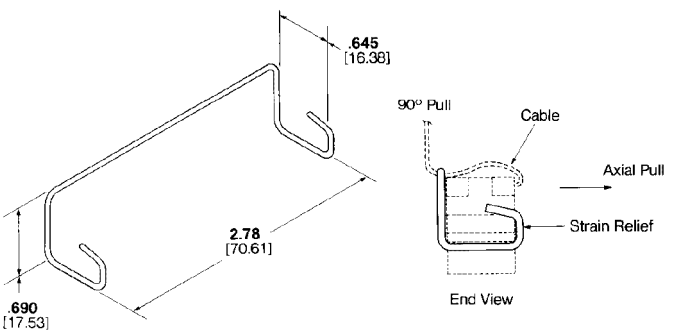
No. of Pos.	Part Numbers				
	Bail Lock Plug Assembly	Screw Lock Plug Assembly	Screw Lock Receptacle Assembly	Panel Mount Plug Assembly	Panel Mount Receptacle Assembly
14	—	553596-1	553597-1	—	—
24	—	553598-1	553599-1	554103-1	554088-1
36	554084-1	553600-1	553601-1	—	554089-1
50	554085-1	553602-1	553603-1	—	554090-1

CHAMP Latch Cable Strain Relief Clip

Part No. 554099-1

Material and Finish:

Stainless steel wire .050 [.127] dia.



CHAMP Miniature Ribbon Connectors

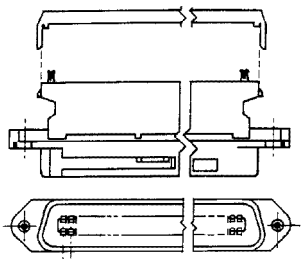
CHAMP Latch Connectors — 64 Position

Material and Finish:

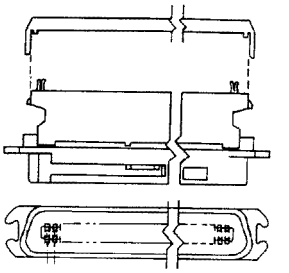
Housing and Covers— Thermoplastic (black)

Terminals—Gold over nickel plated high strength copper alloy on mating face and gold flash over nickel plate on terminating side

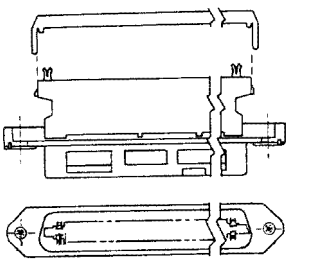
Ribbon and Flexible Flat Cable Products (Continued)



Style PS



Style PB

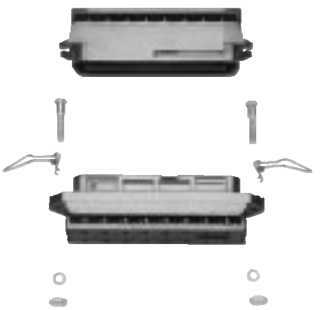


Style RS

Style	Part Number
PS	552837-1
PB	552933-1
RS	552838-1

CHAMP Latch Low Profile Connectors Cable-to-Cable Hardware Kits

CHAMP-LOK Hardware Kit
Part No. 552723-1 (36 & 50 Pos.)
Part No. 552723-2 914 & 24 Pos.)



Bail Lock Hardware Kit
Part No. 552561-3

Screw Lock Hardware Kit
Rear Panel Mount Application
Part No. 552568-2

Bail Lock Hardware Kit
Part No. 552567-3

CHAMP-LOK Hardware Kit
Part No. 553359-1 (36 & 50 Pos.)

CHAMP Miniature Ribbon Connectors

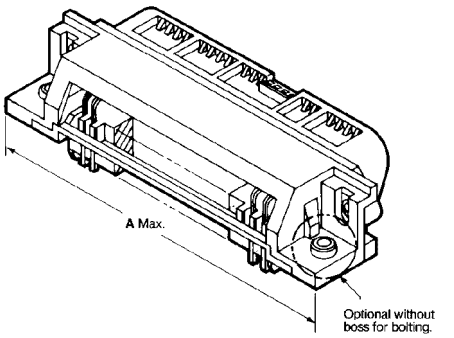
Ribbon and Flexible Flat Cable Products (Continued)

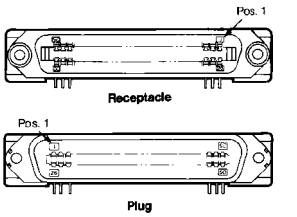
CHAMP PC Board Connectors — Right-Angle

Material and Finish:

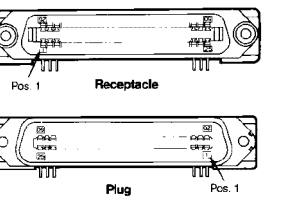
Housing Bracket, Plate & Comb— Thermoplastic 94V-0 rated, black

Terminals—Gold over nickel plated high strength copper alloy on mating face and tin plated tails





Standard Orientation



Reverse Orientation

No. of Pos.	Dim. A	Self Tapping Part Numbers			
		Standard Orientation		Reverse Orientation	
		Receptacle	Plug	Receptacle	Plug
14	**1.750** 44.45	552738-1	—	—	—
36	**2.685** 68.20	552742-1	552743-1	552742-2	—
50	**3.280** 83.31	552725-1	552726-1[1]	552725-3	552726-3[1]
		552725-2[1]	—	—	—
64	**3.875** 98.43	552744-1	552745-1	—	—

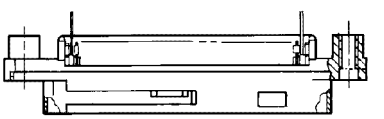
[1]Thru-Bolt Mounting.

CHAMP PC Board Connectors — Vertical & Edge Mount

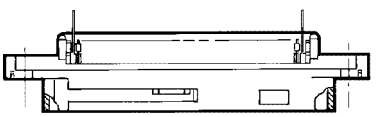
Material and Finish:

Housing Bracket, Plate & Comb— Thermoplastic 94V-0 rated, black

Terminals—Gold over nickel plated high strength copper alloy on mating face and tin plated tails

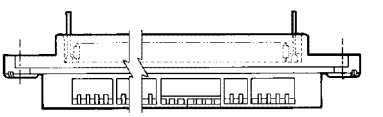


Plug Style PV Vertical Mount, Screw Lock



Plug Style PE Edge Mount, Screw Lock

Receptacle Style RV, Screw or Bail Lock



Receptacle Style RE, Screw or Bail Lock

No. of Pos.	Part Numbers			
	Plug		Receptacle	
	Style PV Vertical Mount	Style PE Edge Mount	Style RV Vertical Mount	Style RE Edge Mount
14	552209-1	—	552212-1	—
24	552221-1	—	—	552230-1
36	552232-1	—	552235-1	—
50	552116-1	552126-1	552118-1	—
64	552243-1	—	552246-1	—

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Vertical Mount Connector Hardware Kits

Screw Lock Hardware Kit
Part No. 552563-1

Bent Bail Lock Hardware Kit
Part No. 552562-2

Bail Lock Hardware Kit
Part No. 552562-1

J-Hook Screw Lock Hardware Kit
Part No. 552690-1

ACTION PIN Connectors

No. of Pos.	Part Numbers	
	Plug	Receptacle
14	—	553443-1
24[1]	—	553443-2
36	—	553443-3
50	553444-4 554758-1[2,3]	553443-4 554753-1[2] 557984-1[4]
64	553444-5 554759-1[2]	553443-5

[1]For IEEE-488 Applications use **Part No. 553609-1.**
[2]Connector contains self retained terminals.
[3]For capacitive filtered connector, order **P/N 93510-X.** Refer to Catalog 65696 for more information.
[4]Shielded for screw lock application.

Shielded PC Board Connectors — Right-Angle, Preassembled

Material and Finish:

Housing Bracket, Connector Comb, & Terminal Support Plate— Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy on mating face and tin plated tails

EMI Shield—Nickel plated die casting

Preassembled Screw Lock

Preassembled Bail Lock

No. of Pos.	Screw Size	Part Numbers		
		Screw Lock		Bail Lock
		Standard	Reverse	Standard
24	6-32	553811-1[2]	—	—
36	4-40	—	—	555233-1
50	4-40	—	553813-4[1,3]	554901-1[1]

[1]SCSI applicable.
[2]Can be used with Interface Bus Application per IEEE-488.
[3]For capacitive filtered connector, order **Part No. 93533-X.** Refer to Catalog 65696 for additional filtered connector information.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

CHAMP Miniature Ribbon Connectors

Shielded PC Board Connectors — Right-Angle, Board Locking Grounding

Material and Finish:

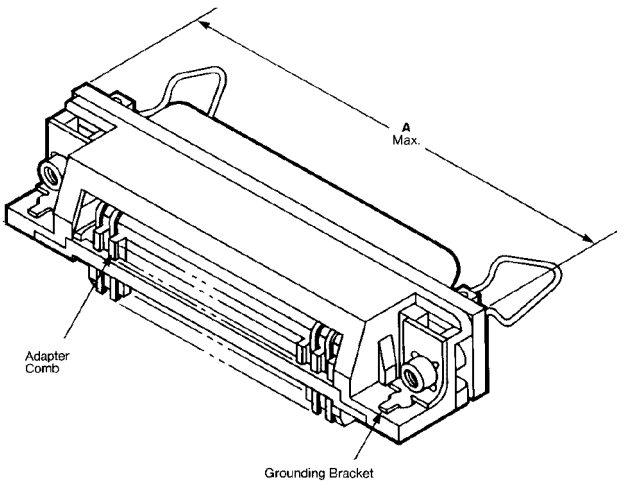
Housing Bracket, Connector Comb, & Terminal Support Plate— Thermoplastic, black

Bail Clip—Passivated stainless steel

Receptacle Shield—Bright nickel over copper plated die casting

Terminals—Gold over nickel plated high strength copper alloy on mating face and tin plated tails

Ground Bracket—Tin-lead plated carbon steel



No. of Positions	Dimension A	Hardware Type	Screw Size	Part Numbers	
				Standard	Low-Profile
24	**2.205** 56.01	Screw Lock	6-32	554923-2[1]	555139-1[5] 555139-2[5]
36	**2.715** 68.96	Bail Lock	4-40	555119-1[1] 555520-2[1,4]	—
50	**3.320** 84.33	Bail Lock	4-40	555057-1[1,2,6]	—
50	**3.320** 84.33	Screw Lock	4-40	557932-2[7]	—

Special Low-Profile Connectors—Compatible with IBM PC AT and PC XT

No. of Positions	Dimension A	Hardware Type	Screw Size	Part Numbers	
				Standard	Reverse
50	**3.310** 8407	Bail Lock	4-40	555149-1[2,3]	555149-3[3]

[1]Maximum Pc board thickness is .062 [1.57], A = .450
[2]SCSI applicable
[3]Maximum Pc board thickness is .062 [1.57], A = .386
[4]Has drawn metal shield
[5] Shielded with ground bracket 4-40 thread (low profile)
[6]For capacitive filtered version order **P/N 93960-X.** Refer to catalog 65696
[7]Plated Backshell

Shielded Right-Angle Connector Hardware Kit

Material and Finish:

Bracket—Zinc plated carbon steel

Pan Head Screw—Passivated stainless steel

Screw Lock—Zinc plated with yellow chromate over steel

Metric Screw Lock—Black oxide coated carbon steel

Metric Screw Lock Hardware Kit for IEEE-488 Application Part No. 554808-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

CHAMP Miniature Ribbon Connectors

Shielded Vertical Mount Connectors

Material and Finish:

Housing—Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy on mating face and tin plated tails

EMI Shield—Nickel plated die casting

Ribbon and Flexible Flat Cable Products (Continued)

Screw Lock

Bail Lock

No. of Positions	Tine Length	Screw Lock 6-32 Hole	Screw Lock 4-40 Hole	Bail Lock 4-40 Hole	Board Lock w/Bail Lock
24	**.115** 2.92	554501-1[3]	—	—	—
36	**.100** 2.54	—	—	555757-2[4]	—
	.215 5.46	—	—	554145-4	—
50	**.115** 2.92	—	—	554216-3[2]	—
	.180 4.57	—	—	—	—
	.215 5.46	—	554217-4[1]	—	—

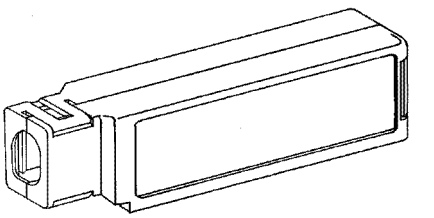
[1]SCSI applicable with use of Bail Lock Hardware Kit Part No. 554818-2.
[2]SCSI applicable.
[3]Can be used with Interface Bus Applications per IEEE-488.
[4]Low-profile, stamped shield.

CHAMP System 5 90° Strain Relief

Material and Finish:

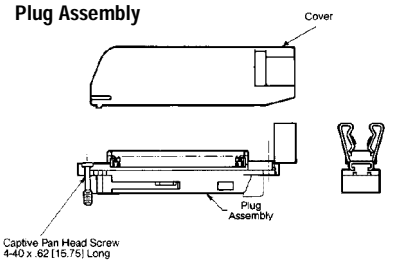
Housing—Thermoplastic, light almond

Cable Diameter Range	Part Numbers Strain Relief	Part Numbers Cover
.650-.750 [16.51-19.05]	569939-1	—
.475-.540 [12.07-13.72]	—	552731-1

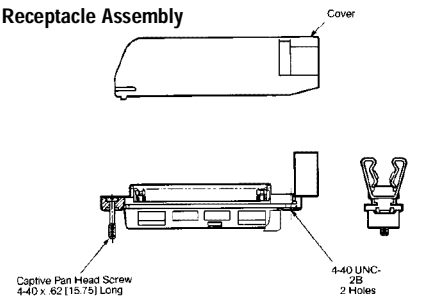


CHAMP System 5, 90° Strain Relief — For 50 Position

Plug Assembly



Receptacle Assembly



Wire Size Solid AWG	Wire Size Solid mm	Wire Size 7 Strand AWG	Wire Size 7 Strand mm²	Housing Color Dot Description	Contact Letter Code	Housing Color	Part Numbers Plug	Part Numbers Receptacle
24-26	0.51-0.40	24	0.20	Blue	B	Gray	553213-3	553212-3
24-26	0.51-0.40	24	0.20				—	554886-2[1]

[1]Integral Locking Latch.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

CHAMP Miniature Ribbon Connectors

Ribbon and Flexible Flat Cable Products (Continued)

Back-to-Back Connector Assembly

Material and Finish:

Housing—Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy on mating face and tin plated tails

Preassembled Screw Lock 50 Position, B-Slot Kit Cable-to-Cable Application Part No. 553257-1

24-Position Shielded CHAMP IEEE-488 Cable Assemblies

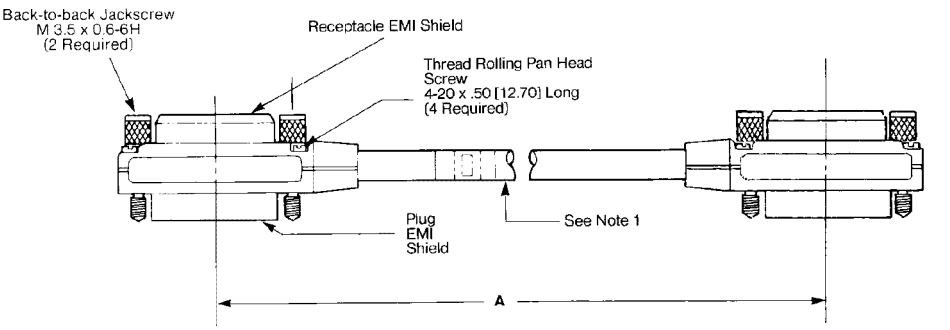
Material and Finish:

Housing—Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy

Metric Jackscrew—Black oxide plated carbon steel

EMI Shield—Nickel plated non-ferrous die casting



Dimension A		Part Numbers
in.	m	
39.37	1.0	553577-2
78.74	2.0	553577-3
157.48	4.0	553577-5

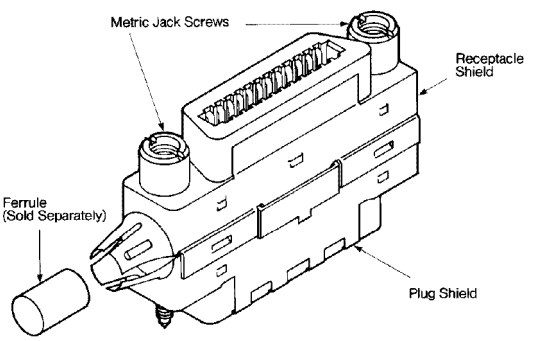
Shielded Back-to-Back Cable Connector Kit

Material and Finish:

Housing and Cover—Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy

Jackscrew—Black oxide plated carbon steel



Inner Ferrules

Inside Diameter	Part Numbers
.300 7.62	554725-2
.350 8.89	554725-3
.400 10.16	554725-4

Cable Connectors

Connector Styles	Cable Diameter Range	Post Moldable	Kit Part Number
Back-to-Back	**.300-.375** 7.62-9.53	Yes	555182-1

Shielded Back-to-Back Cable Connector Kit — 24-Position Interface Bus Connector
Part No. 554815-1

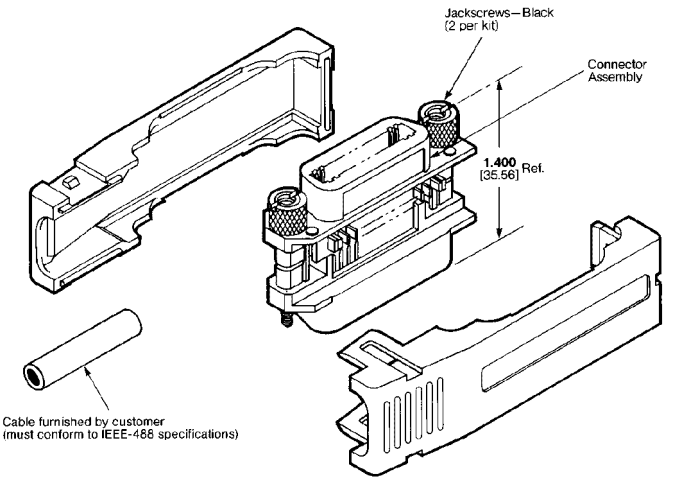
Snap-On Covers
Part No. 554831-1

Material and Finish:

Housing and Cover—Thermoplastic, black

Terminals—Gold over nickel plated high strength copper alloy

Jackscrew—Black oxide plated carbon steel



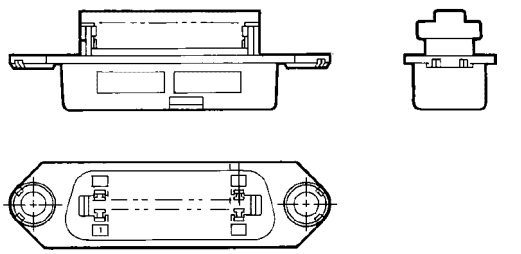
Interface Bus IDC Connector Panel Mount Applications — 24-Position Receptacle

Material and Finish:

Housing—Thermoplastic, black

Contacts—Selectively plated gold over nickel on high strength copper alloy

For Wire Size 24-26 AWG [0.51-0.40 mm] Solid and 24 AWG [0.20 mm²]
Part No. 2-552273-1



Interface Bus IDC Connector Panel Mount Applications — Snap-On Strain Relief, 24 Position Low Profile

Part No. 1-552298-1

Material and Finish:

Thermoplastic, black

Interface Bus IDC Connector Panel Mount Applications — Panel Mount Metric Screw Lock Hardware Kits

Material and Finish:

Thermoplastic, black

For Front Panel Mount
Part No. 552633-3

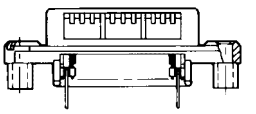
For Rear Panel Mount
Part No. 552633-4

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

CHAMP Miniature Ribbon Connectors

Ribbon and Flexible Flat Cable Products (Continued)

Inteface Bus PC Board Connector Applications — Vertical Mount Receptacle



Part No. 552244-1

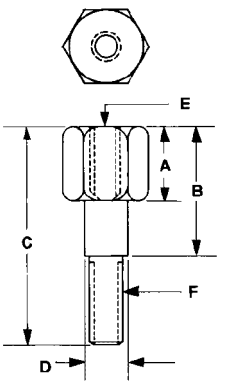
Material and Finish:

Housing and Cover—Thermoplastic, black

Contacts—Selectively plated gold over nickel on high strength copper alloy, tin plated tails

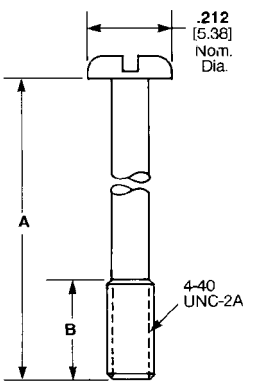
Miscellaneous Mounting Hardware

Standoff Mounting Studs



Dimensions						Part Number
A	B	C	D	E	F	
.239 6.07	**.347** 8.81	**.640** 16.26	**.141** 3.58	4-40	4-40	229995-2
.250 6.35	**.605** 15.37	**1.000** 25.40	**.112** 2.84	4-40	4-40	552113-1
.256 6.50	**.339** 8.61	**.650** 16.51	**.165** 4.19	M 3.5 x .6	4-40	552634-3

Captive Pan Head Screw



Dimensions		Part Number
A	B	
.750 19.05	**.250** 6.35	229911-1
.620 15.75	**.250** 6.35	229911-2
.425 10.80	**.100** 2.54	229996-2
.350 8.89	**.100** 2.54	229996-3

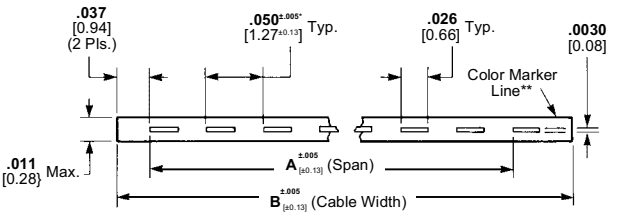
Ribbon and Flexible Flat Cable Products (Continued)

.050 [1.27] Centerline Flexible Flat Connector Cable — .026 [0.66] Wide x .003 [0.08] Thick Conductors

Material and Finish

Conductors — Unplated copper per QQ-C-502

Insulation — Flame retardant polyester film



Electrical Ratings

Voltage — 300 Volts AC

Impedance — 113 Ohms GND, SIG-GND

Capacitance — 13.8 pf/ft max.

Resistance — 110 Ohms/1000 ft. max.

Cable Size (No .of Conductors)	Dimensions				Part No.[1]
	A		B		
	Inch	mm	Inch	mm	
6	**.250**	6.35	**.350**	8.89	2-499795-7
8	**.350**	8.89	**.450**	11.43	2-499795-8
10	**.450**	11.43	**.550**	13.97	499795-1
15	**.700**	17.78	**.800**	20.32	499795-6
20	**.950**	24.13	**1.050**	26.67	1-499795-1
25	**1.200**	30.48	**1.300**	33.02	1-499795-6
50	**2.450**	62.23	**2.550**	64.77	2-499795-4

[1]Cable packaged 500 ft. [152.4 m] per reel.

.050 [1.27] Centerline Contact

Material and Finish

Phosphor bronze, plated gold duplex or bright tin-lead overall

Receptacle Strip

Receptacle Strip

Type	Contacts		Application Tooling	
	Configuration	Duplex	Machine	With Programmer
Receptacle	Strip	[1]487547-1	224910-4	318619-4
Solder Tab	Strip	[2]487923-1		

[1]Duplex plated .000030 [0.00076] gold on mating area, .000100 [0.00254] min. bright tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel.
[2]Plated .000100 [0.00254] min. tin-lead over 000050 [0.00127] min. nickel.

.050 [1.27] Centerline Single Row Receptacle Housings

Material

Housing — Thermoplastic, flame retardant, 94V-0, black

Plain Receptacle

Latch Style Receptacle

No. of Pos.	Part Numbers	
	Plain Receptacle Housing	Latch Style Receptacle Housing
4	–	487545-1
5	–	487545-2
6	–	487545-3
8	–	487545-5
10	–	487545-7
15	–	1-487545-2
20	–	1-487545-7
25	2-487544-2	2-487545-2
30	–	2-487545-7
40	–	3-487545-7
50	–	4-487545-7

.050 [1.27] Centerline Unshrouded, Single Row, Vertical, Thru-Hole Headers

Material and Finish

Housing — Thermoplastic, flame retardant, 94V-0, black

Contacts — Copper alloy , plated .000030 [0.00076]gold on mating area, .000150 [0.00381] tin-lead on solder posts, all over .000050 [0.00127] nickel underplate

No. of Pos.	Part Number
4	104178-1
8	104178-5
25	1-104178-3

.050 [1.27] Centerline Shrouded, Single Row, Right-Angle, Thru-Hole Headers

Material and Finish

Housing — Thermoplastic, flame retardant, 94V-0, black

Contacts — Copper alloy , plated .000030 [0.00076] gold on mating area, .000150 [0.00381] tin-lead on solder posts, all over .000050 [0.00127] nickel underplate

No. of Positions	Part Number
4	104074-7
5	104074-2
8	1-104074-0
10	104074-1
12	1-104074-1
15	104074-3
20	104074-4
22	1-104074-4
25	104074-5
30	104074-6

.050 [1.27] Centerline Shrouded, Single Row, Vertical, Thru-Hole Headers

Material and Finish

Housing — Thermoplastic, flame retardant, 94V-0, black

Contacts — Copper alloy , plated .000030 [0.00076] gold on mating area, .000150 [0.00381] tin-lead on solder posts, all over .000050 [0.00127] nickel underplate

No. of Positions	Part Number	No. of Positions	Part Number
4	104071-7	17	1-104071-3
6	104071-8	20	104071-4
8	1-104071-0	25	104071-5
10	104071-1	30	104071-6
15	104071-3	36	1-104071-6

.050 [1.27] Centerline Shrouded, Double Row, Receptacle Housings

Material and Finish

Housing — Thermoplastic, flame retardant, 94V-0, black

No. of Positions	Latch Style Part Number
30	3- 487937-0
40	4-487937-0
50	5-487937-0
60	6-487937-0
100	487937-1

Latch Style Housing

.050 [1.27] Centerline Unshrouded, Double Row, Thru-Hole Headers

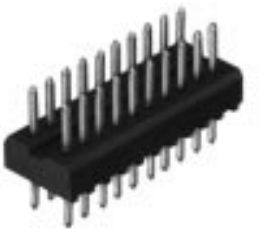
Material and Finish

Housing — Thermoplastic, flame retardant, 94V-0, black

Contacts — Copper alloy , plated .000030 [0.00076] gold on mating area, .000150 [0.00381] tin-lead on solder posts, all over .000050 [0.00127] nickel underplate

No. of Pos.	Part Numbers	
	Right Angle Header	Vertical Header
30	–	103916-9
36	–	1-103916-8
40	1-104118-4	1-103916-1
60	–	1-103916-4
80	–	1-103916-6

Right-Angle Header



Vertical Header

.050 [1.27] Centerline Shrouded, Double Row, Thru-Hole Headers

Material and Finish

Housing — Thermoplastic, flame retardant, 94V-0, black

Contacts — Copper alloy , plated .000030 [0.00076] gold on mating area, .000150 [0.00381] tin-lead on solder posts, all over .000050 [0.00127] nickel underplate

No. of Pos.	Part Numbers	
	Right Angle Header	Vertical Header
16	–	1-104068-0
20	104069-1	104068-1
24	1-104069-2	1-104068-1
26	1-104069-3	–
30	104069-5	104068-3
40	104069-6	104068-4
50	104069-2	104068-5
60	104069-7	104068-6
68	1-104069-8	1-104068-8
72	–	1-104068-5
80	104069-3	1-104068-6
100	1-104069-7	1-104068-7

Right-Angle Header

Vertical Header

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Ribbon and Flexible Flat Cable Products (Continued)

.100 [2.54] Centerline Flexible Flat Connector Cable — .050 [1.27] Wide x .003 [0.08] Thick Conductors

Material and Finish

Conductors — Unplated copper per QQ-C-502

Insulation — Flame retardant polyester film

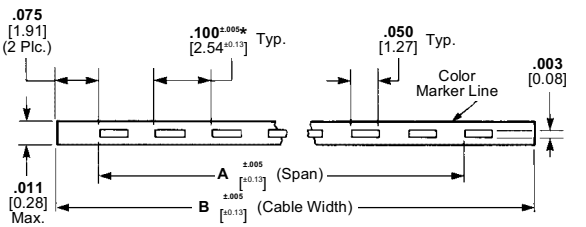
Electrical Ratings

Voltage — 300 Volts AC

Impedance — 128 Ohms GND, SIG-GND nom.

Capacitance — 10.8 pf/ft max.

Resistance — 55 Ohms/1000 ft. max.



Cable Size (No. of Conductors)	Dimensions A Inch	Dimensions A mm	Dimensions B Inch	Dimensions B mm	Part No.
2	**.100**	2.54	**.300**	7.62	88586-1
4	**.300**	7.62	**.500**	12.7	88586-3
5	**.400**	10.16	**.600**	15.24	88586-4
6	**.500**	12.7	**.700**	17.78	88586-5
7	**.600**	15.24	**.800**	20.32	88586-6
8	**.700**	17.78	**.900**	22.86	88586-7
10	**.900**	22.86	**1.100**	27.94	88586-9
11	**1.000**	25.4	**1.200**	30.48	1-88586-0
12	**1.100**	27.94	**1.300**	33.02	1-88586-1
13	**1.200**	30.48	**1.400**	35.56	1-88586-2
14	**1.300**	33.02	**1.500**	38.1	1-88586-3
15	**1.400**	35.56	**1.600**	40.64	1-88586-4
16	**1.500**	38.1	**1.700**	43.18	1-88586-5
17	**1.600**	40.64	**1.800**	45.72	1-88586-6
18	**1.700**	43.18	**1.900**	48.26	1-88586-7
20	**1.900**	48.26	**2.100**	53.34	1-88586-9

Notes: 1. Cable is packaged 500 ft [152.4 m] per reel.

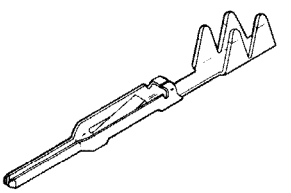
Flexible Film Contacts, Continuous Strip for Sequential Termination

Material and Finish

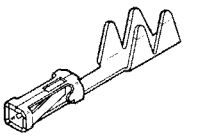
Phosphor bronze, plated gold duplex or bright tin-lead overall

Cable Thickness — .015 [0.38] max.

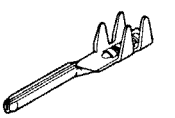
Conductor Width — .047 [1.19] min.



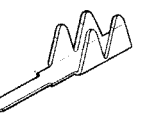
Pin Contact (for use in housings)



Receptacle Contact (accepts .025[2] Pins



Pin Contact (for use without housings)



Solder Tab

Contacts for Flexible Flat Conductor Cable						Application Tooling	
Type	Configuration	Part Numbers Duplex[1]	Duplex[2]	Tin-Lead[3]	Duplex[4]	Machine	With Programmer
Pin (for use in housings)	Strip	88117-3	88117-4	88117-5	—	224910-1	318619-1
Receptacle (standard pressure)	Strip	487406-1	487406-2	487406-4	487406-3		
Receptacle (high pressure)[5]	Strip	487117-4	487117-5	487117-8	—		
Solder Tab[6]	Strip	—	—	88997-2	—		
Pin (for use without housing)	Strip	—	—	88976-2	—		

[1]Duplex plated .000015 [0.00038] gold on mating area, .000100 [0.00254] min. bright tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel.

[2]Duplex plated .000030 [0.00076] gold on mating area, .000100 [0.00254] min. bright tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel.

[3]Plated .000100 [0.00254] min. bright tin-lead over .000050 [0.00127] min. nickel on entire contact.

[4]Duplex plated .000050 [0.00127] gold on mating area, .000100 [0.00254] min. bright tin-lead in crimp area, with entire contact underplated .000050 [0.00127] min. nickel.

[5]High pressure receptacle contacts are recommended for a maximum connector size of 15 positions.

[6]Recommended hole size for solder tabs is .031-.035 [0.79-0.89] diameter.

Note: Round wire contacts—Page 270.

.100 [2.54] Centerline Single Row Slim-Line Receptacle Housings

Material

Housing — Thermoplastic, flame retardant, 94V-0, black

No. of Pos.	Receptacle Part Numbers		
	Plain	Latch	Detent
2	487378-1	487526-1	—
3	487378-2	487526-2	—
4	487378-3	487526-3	487769-2
5	487378-4	487526-4	487769-3
6	487378-5	487526-5	487769-4
7	487378-6	487526-6	—
8	487378-7	487526-7	487769-6
9	487378-8	487526-8	—
10	487378-9	487526-9	487769-8
11	1-487378-0	1-487526-0	—
12	1-487378-1	1-487526-1	1-487769-0
13	1-487378-2	—	—
14	1-487378-3	1-487526-3	1-487769-2
15	1-487378-4	—	—
16	1-487378-5	1-487526-5	1-487769-4
17	1-487378-6	1-487526-6	—
18	1-487378-7	1-487526-7	—
20	1-487378-9	—	—
22	2-487378-1	—	—

Plain Style Housing

Latch Style Housing

Housing with Detent

.100 [2.54] Centerline Single Row Polarized Housings without Mounting Ears

Material

Housing — Thermoplastic, flame retardant, 94V-0, black

No. of Pos.	Part Numbers	
	Pin Housings	Receptacle Housings
3	494032-2	88859-9
4	485893-2	1-88859-0
5	485893-3	—
6	485893-4	88859-1
7	485893-5	—
8	485893-6	88859-2
9	—	1-88859-3
10	485893-8	88859-3
11	—	1-88859-4
12	1-485893-0	88859-4
14	—	88859-7
20	—	88859-8

Polarized Pin Housing with Detent Window

Polarized Receptacle Housing with Detent

.100 [2.54] Centerline Double Row Polarized Housings with and without Mounting Ears

Material

Housing — Thermoplastic, flame retardant, 94V-0, black

Pin Housing with Mounting Ears

Pin Housing without Mounting Ears

Receptacle Housing with Mounting Ears

Receptacle Housing without Mounting Ears

No. of Pos.	Pin Housing Part Numbers		Receptacle Housing Part Numbers	
	w/ Mtg. Ears	w/o Mtg. Ears	w/ Mtg. Ears	w/o Mtg. Ears
10	—	3-88189-0	—	3-88179-0
16	3-88190-4	—	88637-3	—
20	88190-8	—	—	88179-5
50	—	—	2-88637-7	—

.100 [2.54] Centerline Double Row Receptacle Housings with and Center Polarization

Material

Housing — Thermoplastic, flame retardant, 94V-0, black

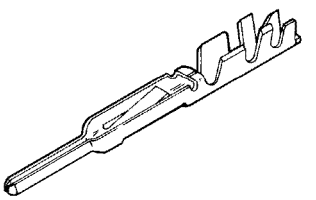
No. of Pos.[1]	Part No.
10	487223-1
14	487223-2
16	487223-3
20	487223-5
34	487223-9
40	1-487223-0
50	1-487223-2

[1]Tin plated contacts are not recommended for use in receptacles larger than 40 positions.

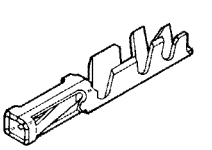
.100 [2.54] Centerline Round Wire Contacts, Continuous Strip and Loose Piece

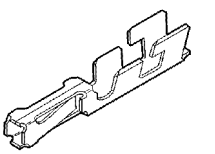
Material and Finish

Phosphor bronze, selective gold plated or bright tin-lead overall



Pin Contact





Receptacle Contacts Contact Accepts .025[2] Posts (not for use in Slim-Line Receptacle Housings

Contact Type	Wire Size Range AWG	Wire Size Range mm²	Ins. Dia. Range	Contact Finish	Strip Form Contact No.	Application Tooling Applicator Numbers for AMP-O-LECTRIC[4] Machine No. 565435-5	Application Tooling Applicator Numbers for AMPOMATOR CLS II[5] Machine No. 815800-1	Application Tooling Applicator Numbers for AMP-O-MATIC* Machine No. 463345-1	Application Tooling Applicator Numbers for Loose Piece Contact No.	Application Tooling Applicator Numbers for Hand Tool No.	Application Tooling Applicator Numbers for Instruction Sheet No. (IS)
Pin	32-26	0.03-0.15	**.025-.048** 0.64-1.22	Sel. Gold[1]	88048-4	466242-1	—	466933-1	—	—	—
	26-22	0.12-0.4	**.040-.056** 1.02-1.42	Sel. Gold[1]	86557-6	466572-2	466572-1	466909-1	86561-6	90222-6	7974
				Tin-Lead[3]	1-86557-4	466572-2	466572-1	466909-1	86561-9	90222-6	
	24-22		**.040-.056** 1.02-1.42	Sel. Gold[1]	494033-2	567308-2	567308-1	—	494034-1	90378-1	7953
Receptacle	26-22	0.12-0.4	**.040-.056** 1.02-1.42	Sel. Gold[1]	86566-2	466572-2	466572-1	466909-1	86571-2	90222-6	7974
				Tin-Lead[3]	86566-8	466572-2	466572-1	466909-1	86571-8	90222-6	
	24-22		**.040-.056** 1.02-1.42	Sel. Gold[1]	—	—	—	—	86657-2	90378-1	7953

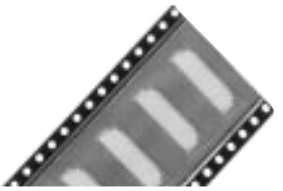
*Side Feed Stripper/Crimper Machine Model II.

[1]Selectively plated .000015 [0.00038] gold on mating area, gold flash on remainder of contact, with entire contact underplated .00050 [0.00127] min. nickel.
[2]Selectively plated .000030 [0.00076] gold on mating area, gold flash on remainder of contact, with entire contact underplated .00050 [0.00127] min. nickel.
[3]Plated .000100 [0.00254] min. bright tin-lead over .00050 [0.00127] min. nickel on entire contact.
[4]Crimp Control Monitor Part No. **567561-2**.
[5]Crimp Control Monitor Part No. **567561-1**.

Note: Use Extraction Tool No. **91092-1** for end locking lance slot and Extraction Tool No. **91093-1** for side locking lance slot.

Ribbon and Flexible Flat Cable Products (Continued)

AMP 1.0 [.039] FPC Connectors



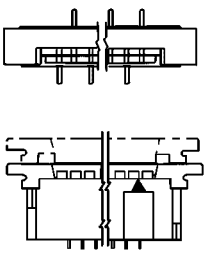
Material

Housing — LCP

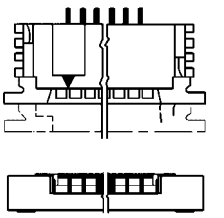
Solder Tabs — Phosphor bronze, tin-lead plating

Contact & Finish — Phosphor bronze, tin-lead plating

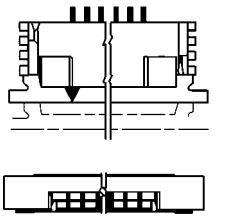
Spider — Thermoplastic, 94V-0, black



Vertical Surface Mount



Top Contact Mount



Bottom Contact Mount

No. of Pos.	Part Numbers		
	Vertical Surface Mount	Top Contact Mount	Bottom Contact Mount
4	—	—	487952-4
8	—	—	487952-8
12	—	1-487951-2	—
14	—	1-487951-4	—
16	—	1-487951-6	—
20	2-487953-0	2-487951-0	—
22	—	2-487951-2	—
30	—	3-487951-0	3-487952-0

Integrated Circuit (IC) Products

Click Below

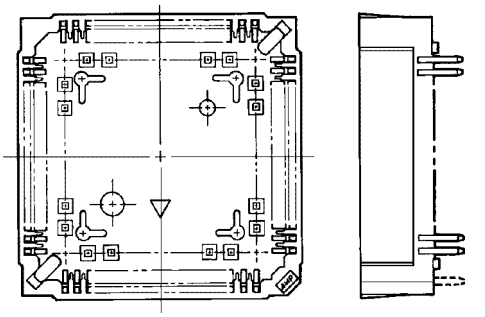
Table of Contents

Section Four: Integrated Circuit (IC) Products

PLCC Sockets — (HPT) with Solder Tails

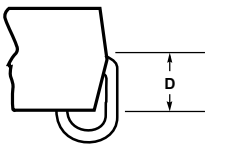
Material and Finish

Housing Material — PPS or PCT, UL 94V-0 rated
Contacts — Phosphor bronze
Plating — .000150 [0.00381] min. tin-lead (93-7) over .000040 [0.00102] min. nickel



No. of Pos.	Package Configuration	PLCC Dim. D			With Plastic[1] Polarizing Pin
		.055-.075[1] [1.40-1.91]	.055-.075[2] [1.40-1.91]	.070-.090[1] [1.78-2.29]	
20	Square	821815-1	—	—	—
28	Square	821581-1	3-821581-1	821581-3	—
32	Rectangular	821665-1	3-821665-1	—	822147-1
44	Square	821575-1	3-821575-1	821575-3	—
52	Square	821551-1	—	821739-3	—
68	Square	821574-1	3-821574-1	821574-3	822149-1
84	Square	821573-1	3-821573-1	821573-3	—

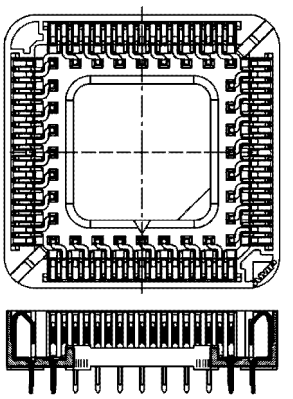
[1]Packaged in trays. [2]Packaged in tubes.



PLCC Sockets — Low Profile with Solder Tails

Material and Finish

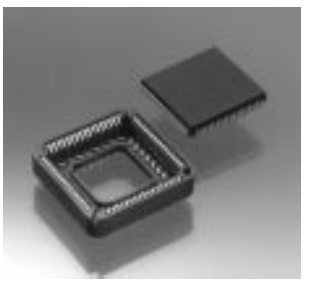
Housing — High temperature PCT polyester
Contact — Phosphor bronze with .000100 [0.00254] min. thick precoated tin finish



52-Position —
Part Number 822437-4

68-Position —
Part Number 822437-5

84-Position —
Part Number 822437-6

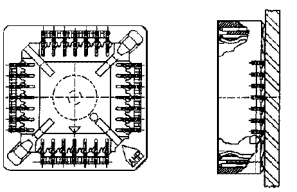


PLCC Sockets — Low Profile, Surface Mount Square Socket and Rectangular Socket

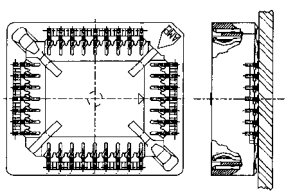
Material and Finish

Housing — Polyphenylene sulfide, 40% glass-filled, 94V-0 rated 220°C
Contact — Phosphor bronze, plated .000200 [0.00508] min. tin-lead per MIL-T-10727 Type I over .000050 [0.00127] min. nickel per QQ-N-290

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.



Square Socket



Rectangular Socket

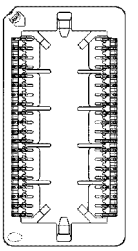
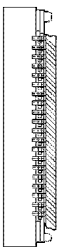
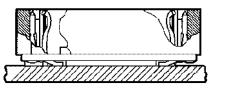
No. of Pos.	Low Insertion Force			Ultra Low Profile Socket Without Locating Posts
	Without Locating Posts	With Locating Posts	Tape Mounted Without Locating Posts	
20	822269-1	822270-1	3-822269-1	—
28	822271-1	822272-1	3-822271-1	—
32	822273-1[1]	822274-1[1]	3-822273-1[1]	822403-1[1]
44	822275-1	822276-1	3-822275-1	—
52	822277-1	822278-1	3-822277-1	—
68	822279-1	822280-1	3-822279-1	—
84	822281-1	822282-1	3-822281-1	—

[1]Rectangular Socket Part Numbers

Integrated Circuit (IC) Products (Continued)

PLCC Sockets — Low Profile, SOJ-Style Surface Mount Sockets

40-Position, .400 [10.16] Centerlines

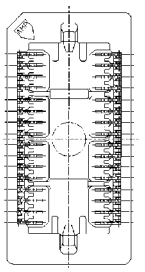
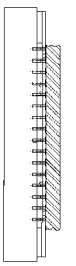
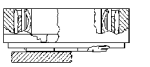
Part Number 822265-2
Without Locating Pins,
Tube Packaged

Part Number 3-822265-2
Without Locating Pins,
Tube Mounted

Material and Finish

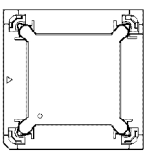
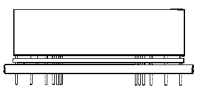
Housing — Polyphenylene sulfide, 94V-0 rated
Contacts — Phosphor bronze, plated .000200 [0.00508] min. 93/7 tin-lead over .000050 [0.00127] min. nickel underplating

32-Position, .300 [7.62] Centerlines

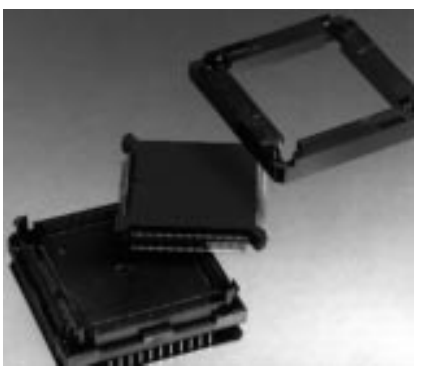
Part Number 3-822374-1
Without Locating Pins,
Tube Mounted

PQFP Sockets, MICRO-PITCH — Standard

100-Position — Conventional
Housing, Part No. 821949-4
Cover, Part No. 821939-1

132-Position — Conventional
Housing,Part No. 821949-5
Cover, Part No. 821942-1

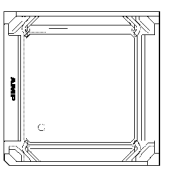
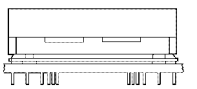


Typical PQFP Socket Application

Material and Finish

Housing — High temperature thermoplastic, 94V-0 rated, black
Cover — Polyphenylene sulfide (PPS), 94V-0 rated, black
Contacts — Phosphor bronze, plated .000200 [0.00508] min. tin over .000050 [0.00127] min. nickel underplating

PQFP Sockets, MICRO-PITCH–Metric for JEDEC Metric Quad Flat Pack ICs

144-Position —
Housing,Part No. 822114-3
Cover, Part No. 822115-3

160-Position —
Housing, Part No. 822114-4
Cover, Part No. 822115-4

Material and Finish

Housing — High temperature thermoplastic, 94V-0 rated, black
Contacts — Phosphor bronze, plated 0.00508 [.000200] min. tin-lead over 0.00127 [.000050]min. nickel underplating

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Integrated Circuit (IC) Products (Continued)

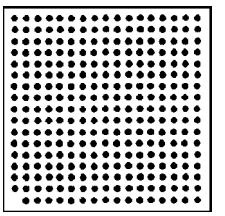
Socket Patterns

Material and Finish

Single Actuated ZIF (SLZ) and Screwdriver Actuated ZIF (SAZ):
Housing — High temperature thermoplastic
Contacts — Copper alloy plated .000030 [0.00076] min. gold over .000050 [0.00127] min. nickel in contact area; .000150 [0.00381] min. tin-lead over .000050 [0.00127] min. nickel in solder area
Actuator (SLZ) — Zinc alloy

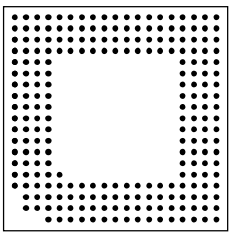
Handle Actuated ZIF (HAZ):
Housing and Cover — LCP
Contacts — Beryllium copper plated .000030 [0.00076] min. gold over .000075 [0.00191] min. nickel in contact area; .000150 [0.00381] min. tin-lead over .000050 [0.00127] min. nickel in solder area

Pattern A



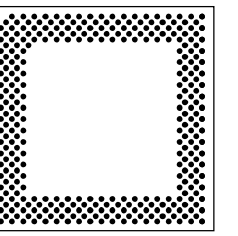
17 x 17
288 Positions
Power PC™

Pattern B



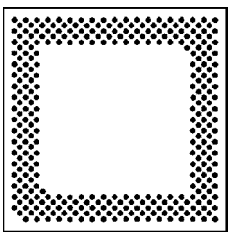
19 x 19
237 Positions
Molded Socket 3

Pattern C



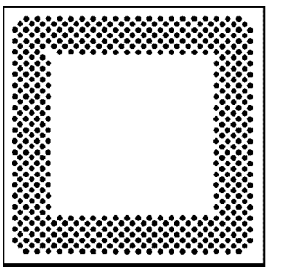
19 x 19
320 Positions
Pentium™
Molded Socket 5

Pattern D



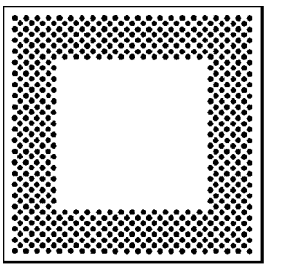
19 x 19
321 Positions
Pentium™
Molded Socket 7

Pattern E



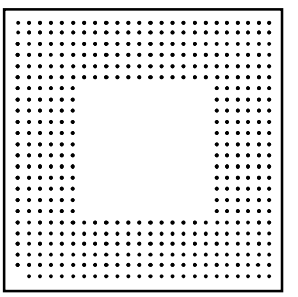
22 x 22
499 Positions
Molded Socket
499 (DEC)

Pattern F



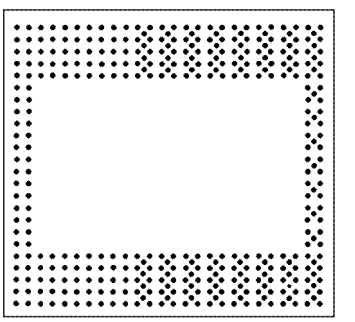
22 x 22
560 Positions

Pattern G



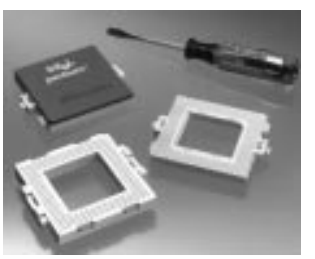
24 x 24
431 Positions
Digital 21064

Pattern H



26 x 24
387 Positions
Pentium™ Pro
Molded Socket 8

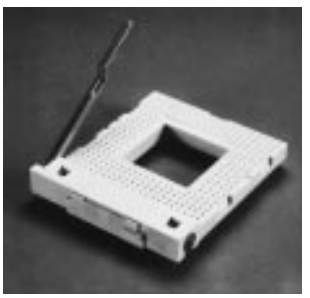
Screwdriver Actuated ZIF (SAZ) Sockets



Pattern Style	Solder Tail Length	Part No.
C	**.080** 2.03	916707-1[1,2]
	.090 2.29	916707-2[1,2]
	.080 2.03	916727-1[1]
	.110 2.79	916635-1
D	**.090** 2.29	916732-2[1,3]

[1] Low profile [2] Rotate pattern 90° clockwise [3] Heat sink compatible

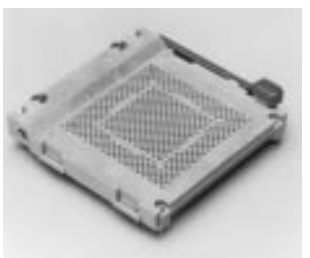
Single Lever ZIF (SLZ) Sockets, Open Center, Heat Sink Compatible



Pattern Style	Solder Tail Length	Part Number
A	**.110** 2.79	916668-1[3]
	.113 2.87	916668-4[1]
B	**.110** 2.79	916541-1
C	**.110** 2.79	916560-1
D	**.110** 2.79	916637-1
	.080 2.03	916756-1[2,5,6]
	.090 2.29	916756-2[2,5,6]
	.110 2.79	916756-3[2,5,6]
	.080 2.03	916657-1[6]
	.090 2.29	916657-2[6]
	.110 2.79	916657-3[6]
	.080 2.03	916658-1[2,6]
	.090 2.29	916658-2[2]
D	**.110** 2.79	916658-3[2,6]
	.090 2.29	916715-2[2,6,7]
	.080 2.03	916716-1[6,7]
	.090 2.29	916716-2[6,7]
	.110 2.79	916716-3[6,7]
	.080 2.03	916774-1[2,6,7]
E	**.110** 2.79	916583-1
G	**.110** 2.79	916603-1
H	**.090** 2.29	916680-2[4]
	.110 2.79	916680-3
	.080 2.03	916738-1
	.090 2.29	916738-2
	.110 2.79	916738-3

[1] .050 [1.27] tall standoffs
[2] .000015 [0.00038] thick gold over nickel on contacts
[3] Full grid, not open center
[4] .000015 [0.00038] thick gold over nickel on solder tails
[5] Heat sink stops
[6] Low Profile
[7] Short handle

Handle Actuated ZIF (HAZ) Socket



Pattern Style	Solder Tail Length	Part Number
F	**.170** 4.32	382676-4

DIP Sockets — DL Standard

Material and Finish

Housing — Glass-filled thermoplastic, 94V-0 rated, black
Contacts — Phosphor bronze or beryllium copper with tin or gold plating

No. of Pos.	Sockets with Straight Solder Tails[1]				Sockets with Retention Solder Tails[1]			
	Beryllium Copper		Phosphor Bronze		Beryllium Copper		Phosphor Bronze	
	Tinned	.000030 [0.00076] Gold Plate	Tinned	.000015 [0.00038] Gold Plate	Tinned	.000030 [0.00076] Gold Plate	Tinned	.000015 [0.00038] Gold Plate
6[2]	2-641296-1	2-641296-2	2-641296-3	2-641296-4	2-641259-1	—	2-641259-3	—
8[2]	2-640463-1	2-640463-2	2-640463-3	2-640463-4	2-641260-1	—	2-641260-3	2-641260-4
14	2-641599-1	2-641599-2	2-641599-3	2-641599-4	2-641609-1	—	2-641609-3	2-641609-4
16	2-641600-1	2-641600-2	2-641600-3	2-641600-4	2-641610-1	—	2-641610-3	2-641610-4
18	2-641601-1	—	2-641601-3	—	—	—	2-641611-3	—
20	2-641602-1	2-641602-2	2-641602-3	2-641602-4	2-641612-1	2-641612-2	2-641612-3	—
22	—	—	2-641603-3	—	—	—	—	—
24	2-641932-1	2-641932-2	2-641932-3	2-641932-4	2-641933-1	—	2-641933-3	—
24	2-641604-1	2-641604-2	2-641604-3	2-641604-4	—	—	2-641614-3	—
28	2-382571-1	—	2-382571-3	—	—	—	—	—
28	2-641605-1	2-641605-2	2-641605-3	2-641605-4	2-641615-1	2-641615-2	2-641615-3	2-641615-4
40	2-641606-1	2-641606-2	2-641606-3	2-641606-4	2-641616-1	2-641616-2	2-641616-3	—
42	—	—	2-382374-3	—	—	—	—	—
48	2-643574-1	—	2-643574-3	—	—	—	—	—
64	643575-1	—	643575-3	—	—	—	—	—

[1] ONLY sockets with straight solder tails are recommended for automatic insertion. All parts are packaged in plastic tubes. Sockets with retention feature are packaged in plastic tubes for handling and storage convenience only.
[2] Closed frame design.

DIP Sockets — DL Standard, Over-the-Component (OTC) Style

Material and Finish

Housing — Glass-filled thermoplastic, 94V-0 rated, black
Contacts — Phosphor bronze or beryllium copper with tin or gold plating

No. of Pos.	Sockets with Straight Solder Tails				Sockets with Retention Solder Tails		
	Beryllium Copper		Phosphor Bronze		Beryllium Copper		Phosphor Bronze
	Tinned	.000030 [0.00076][1] Gold Plate	Tinned	.000015 [0.00038][1] Gold Plate	Tinned	.000030 [0.00076][1] Gold Plate	Tinned
28	—	—	2-382415-3	—	—	—	—
32	2-644018-1	2-644018-2	2-644018-3	2-644018-4	2-382189-1	2-382189-2	2-382189-3
40	—	—	2-382153-3	—	—	—	—

[1] Gold thickness in contact area with tin-lead plate on solder tails. All parts packaged in plastic tubes.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

SIP Sockets and Miniature Spring Sockets

Integrated Circuit (IC) Products (Continued)

DIP Sockets — DL Surface Mount and Surface Mount Compatible

Material and Finish

Housing — PCT Glass reinforced, 94V-0 rated, brown (14-position part numbers (X-382463-X) are glass filled polyester, 94V-0 rated, black)
Contacts — Phosphor bronze or beryllium copper with tin or gold plating

No. of Pos.	Phosphor Bronze			Beryllium Copper
	Surface Mount[1]		Through-Hole[1,2]	Surface Mount[1]
	Tinned	Gold Plate[3]	Tinned	Tinned
8	2-382401-3 8-382401-3[4]	—	—	—
14	2-382402-3	2-382402-4	—	—
16	2-382403-3	—	—	—
18	2-382404-3	—	—	—
20	—	2-382405-4	2-382465-3	—
24	2-382408-3	—	—	—
28	—	—	—	2-382636-1
28	2-382409-3	2-382409-4	2-382467-3	2-382409-1
32	2-382424-3	—	2-382470-3	—
40	2-382411-3	—	—	—

[1] All parts packaged in plastic tubes.
[2] Through-hole sockets are compatible with surface mount soldering practices except where noted.
[3] Two .000015 [0.00038] min. thick gold stripes in contact area with tin-lead (93/7) on solder tails and nickel on balance of contact.
[4] Tape and reel packaged.

SIP Sockets — Solder Tail Dual Leaf (DL)

Material and Finish

Housing — Glass-filled thermoplastic, 94V-0 rated, black
Contacts — Beryllium copper with tin plating

No. of Pos.	Straight Solder Tail		Retention Solder Tail	
	Beryllium Copper	Phosphor Bronze	Beryllium Copper	Phosphor Bronze
	Tinned	Tinned	Tinned	Tinned
3	—	382437-3	—	—
4	382438-1	—	—	—
5	382439-1	—	—	—
6	382440-1	—	—	—
7	382441-1	—	—	—
8	643640-1	643640-3	—	—
9	—	643641-3	643641-6	—
10	643642-1	643642-3	—	643642-8
12	643644-1	643644-3	643644-6	—
14	643646-1	643646-3	643646-6	643646-8
15	643647-1	—	643647-6	—
16	643648-1	643648-3	—	—
18	643650-1	—	643650-6	—
19	—	—	—	—
20	643652-1	643652-3	643652-6	—
24	—	643656-3	—	—
25	643657-1	—	—	—

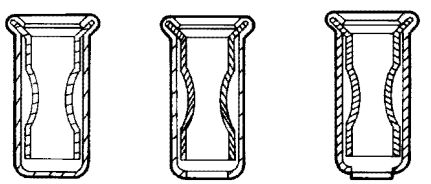
Miniature Spring Sockets —

Material

Spring — Beryllium copper
Contact Sleeve — Copper

Flat Bottom Sockets

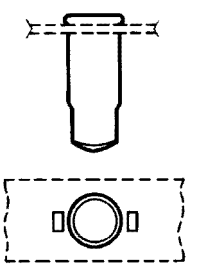
Closed Bottom **Open Bottom** **Knockout Bottom**

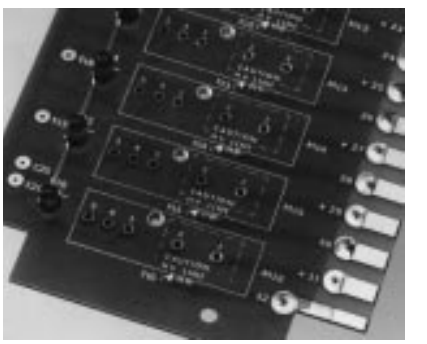


Bullet Nose Sockets (Loose Piece and Tape Mounted)

Material

Spring — Beryllium copper
Contact Sleeve — Copper





BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Miniature Spring Sockets — (Continued)

Integrated Circuit (IC) Products (Continued)

Series 1 Sockets — For .012–.021 [0.30–0.53] Round and .009–.015 [0.23–0.38] Square Leads[3]

Flat Bottom — Recommended Hole Size: $.041^{+.003}_{-.000}$ [$1.04^{+0.08}_{-0.00}$] for Semiautomatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers	
	Spring	Sleeve	Closed Bottom	Knockout Bottom
.013–.020 0.33–0.51	Gold[1]	Gold[2]	2-330808-8	3-330808-8
	Gold[1]	Tin	6-330808-5	5-330808-3
	Tin	Tin	2-330808-7	—
.013–.020 0.33–0.51	Gold[1]	Gold[2]	2-332095-1	2-332095-2

Bullet Nose — Recommended Hole Size:
$.042^{+.003}_{-.000}$ [$1.07^{+0.08}_{-0.00}$] for Semiautomatic/Automatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers		
				Polyester Carrier Tape	
	Spring	Sleeve	Loose Piece	Without Sealant 50,000/Reel	With Sealant 50,000/Reel
.012–.021 0.30–0.53	Gold[1]	Tin	645946-2	—	—
.015–.021 0.38–0.53	Tin	Tin	645945-1	—	645947-1

[1] .000030 [0.00076] gold plating. [2] Gold flash.
[3] To calculate diameter required for rectangular or square leads:

Pin Diameter = $\left[\sqrt{(\text{Lead Width})^2 + (\text{Lead Thickness})^2}\right]$ –.003 [0.08].

Series 2 Sockets — For .014–.026 [0.36–0.66] Round and .010–.018 [0.25–0.46] Square Leads[3]

Flat Bottom — Recommended Hole Size: $.052^{+.003}_{-.000}$ [$1.32^{+0.08}_{-0.00}$] for Semiautomatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers	
	Spring	Sleeve	Closed Bottom	Knockout Bottom
.028–.021 0.46–0.53	Gold[1]	Gold[2]	2-331272-2	3-331272-0
	Gold[1]	Tin	2-331272-3	—
.014–.026 0.36–0.66	Gold[1]	Gold[2]	50863-4	—
	Gold[1]	Tin	50863-5	—
	Tin	Tin	50863-8	—
.022–.025 0.56–0.64	Gold[1]	Gold[2]	2-331272-6	—
	Gold[1]	Tin	2-331272-7	3-331272-5
	Tin	Tin	2-331272-5	—
.014–.026 0.36–0.66	Gold[1]	Gold[2]	50462-6	—
	Tin	Tin	50462-7	—

Bullet Nose — Recommended Hole Size:
$.052^{+.003}_{-.000}$ [$1.32^{+0.08}_{-0.00}$] for Semiautomatic/Automatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers		
				Polyester Carrier Tape	
	Spring	Sleeve	Loose Piece	Without Sealant 50,000/Reel	With Sealant 50,000/Reel
.014–.026 0.35–0.66	Gold[1]	Tin	—	—	645955-2
	Tin	Tin	—	—	645955-1

Miniature Spring Sockets — (Continued)

Integrated Circuit (IC) Products (Continued)

Series 3 Sockets — For .026–.033 [0.66–0.83] Round and .025–.064 [0.64–1.62] Square Leads[3]

Flat Bottom — Recommended Hole Size: $.062^{+.003}_{-.000}$ [$1.57^{+0.08}_{-0.00}$] for Semiautomatic/Automatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers	
	Spring	Sleeve	Closed Bottom	Knockout Bottom
.026–.029 0.66–0.74	Gold[1]	Tin	—	3-331677-2
.026–.033 0.66–0.84	Gold[1]	Tin	50864-1	50864-3
	Tin	Tin	50864-6	—
.030–.033 0.76–0.84	Gold[1]	Gold[2]	1-331677-4	2-331677-9
	Gold[1]	Tin	1-331677-8	3-331677-4
	Tin	Tin	1-331677-3	—

Bullet Nose — Recommended Hole Size: $.062^{+.003}_{-.000}$ [$1.57^{+0.08}_{-0.00}$] for Semiautomatic/Automatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers	
			Polyester Carrier Tape	
	Spring	Sleeve	Without Sealant 10,000/Reel	With Sealant 10,000/Reel
.028–.033 0.71–0.84	Gold[1]	Tin	—	1-645986-2

[1] .000030 [0.00076] gold plating
[2] Gold flash.
[3] To calculate diameter required for rectangular or square leads:
Pin Diameter = $\left[\sqrt{(\text{Lead Width})^2 + (\text{Lead Thickness})^2}\right] - .003$ [0.08].
[4] Applies to Open Bottom and Knockout Bottom Sockets only.

Series 4 Sockets — For .034–.041 [0.86–1.04] Round and .026–.031 [0.66–0.79] Square Leads[3]

Flat Bottom — Recommended Hole Size: $.071^{+.003}_{-.000}$ [$1.80^{+0.08}_{-0.00}$] for Semiautomatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers	
	Spring	Sleeve	Closed Bottom	Knockout Bottom
.034–.041 0.86–1.04	Gold[1]	Tin	50865-5	50865-1
	Tin	Tin	50865-8	50865-7
.037–.040 0.94–1.02	Gold[1]	Gold[2]	1-332070-1	1-332070-7
	Gold[1]	Tin	2-332070-3	3-332070-5
	Tin	Tin	2-332070-2	3-332070-4

Bullet Nose — Recommended Hole Size: $.069^{+.003}_{-.000}$ [$1.75^{+0.08}_{-0.00}$] for Semiautomatic/Automatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers		
				Polyester Carrier Tape	
	Spring	Sleeve	Loose Piece	Without Sealant 10,000/Reel	With Sealant 10,000/Reel
.037–.041 0.94–1.04	Gold[1]	Tin	645500-1	1-645502-1	—
	Tin	Tin	—	—	1-645501-2

Miniature Spring Sockets — (Continued)

Integrated Circuit (IC) Products (Continued)

Series 5 Sockets — For .042–.065 [1.07–1.65] Round and .032–.048 [0.81–1.22] Square Leads[3]

Flat Bottom — Recommended Hole Size: $.102^{+.003}_{-.000}$ $[2.59^{+0.08}_{-0.00}]$ for Semiautomatic Insertion or Hand Insertion

Pin Dia. Range	Finish		Part Numbers	
	Spring	Sleeve	Closed Bottom	Knockout Bottom
.042–.049 1.07–1.24	Gold[1]	Tin	50871-5	50871-1
	Tin	Tin	50871-8	—
.056–.065 1.42–1.65	Gold[1]	Gold[2]	—	1-50871-8
	Gold[1]	Tin	2-50871-3	1-50871-9
	Tin	Tin	2-50871-6	2-50871-4

Bullet Nose — Recommended Hole Size: $.102^{+.003}_{-.000}$ $[2.59^{+0.08}_{-0.00}]$ for Semiautomatic Insertion or Hand Insertion

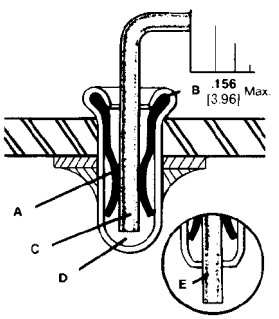
Pin Dia. Range	Finish		Part Numbers		
	Spring	Sleeve	Loose Piece	Polyester Carrier Tape	
				Without Sealant 10,000/Reel	With Sealant 10,000/Reel
.042–0.49 1.07–1.24	Gold[2]	Tin	—	1-645979-2	—
	Tin	Tin	645980-1	—	—

[1].000030 [0.00076] gold plating.
[2]Gold flash.
[3]To calculate diameter required for rectangular or square leads:
Pin Diameter = $\left[\sqrt{(\text{Lead Width})^2 + (\text{Lead Thickness})^2}\right]$ –.003 [0.08].
[4]Applies to Open Bottom and Knockout Bottom Sockets only.

Test Sockets

Reusable Receptacles for Component Testing

Typical Application



A. Receptacle spring member assures true readings by maintaining uniform pressure to create maximum conductivity and hold component lead in place.

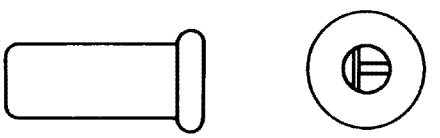
B. Flared lip acts as a stop for the socket and creates a bellmouth entry for easy insertion of component leads.

C. Receptacles firmly retain component leads in two ranges: .018–.040 [0.46–1.02] and .036–.051 [0.19–1.30].

D. Drawn copper cup in all sizes and styles is inserted into .089 [2.26] mounting hole.

E. Open-end styles are available for lead feed-through.

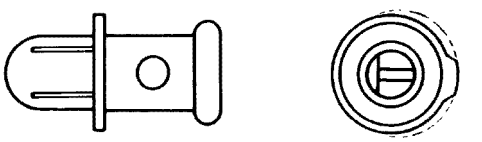
Open Bottom



Accepts Lead Size	Finish		Part Number
	Cup	Spring	
.018–.040 0.46–1.02	Tin-Lead	Gold[1]	380635-2
	Tin-Lead	Tin-Lead	380635-5

[1] .000030 [0.00076] gold plating over nickel plating.

Stand-Off



Accepts Lead Size	Finish		Part Number
	Cup	Spring	
.018–.040 0.46–1.02	Tin-Lead	Gold[1]	1-380737-0
	Tin-Lead	Tin-Lead	640593-1

[1] .000030 [0.00076] gold plating over nickel plating.

Table of Contents Click Below

Section Six: Pin and Socket Connectors

Universal MATE-N-LOK II Connectors

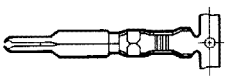
Contacts (Used in either Universal MATE-N-LOK II Plug or Cap housings on page 297)

Split Pin Diameter — .086 [2.18]
Stock Thickness — .012 [0.305]

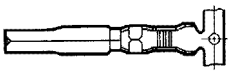
Material and Finish

Brass with pre-tin plating or phosphor bronze duplex plated .000030 [0.00076] min. gold in mating area and inside barrel over .000050 [0.00127] nickel underplate on entire contact

Pin and Socket Connectors (Continued)



Pin



Socket

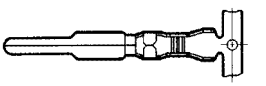
Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Part Numbers			
			Pin		Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
24-18 [.2-.8]	**.040-.100** 1.02-2.54	Brass/Pre-tin	770009-1	770252-1	—	—
		Brass/Duplex[2]	770009-2	770252-2	—	—
		Phos. Brz./Pre-tin	—	—	770010-3	770253-3
		Phos. Brz./Duplex[2]	—	—	770010-4	770253-4
20-14 [.5-2.0]	**.060-.130** 1.52-3.30	Brass/Pre-tin	770007-1	—	—	—
		Brass/Duplex[2]	770007-2	770250-2	—	—
		Phos. Brz./Pre-tin	—	—	770008-3	—
		Phos. Brz./Duplex[2]	—	—	770008-4	770251-4
20-14 [.5-2.0]	**.130-.200** 3.30-5.08	Brass/Pre-tin	770005-1	770248-1	—	—
		Brass/Duplex[2]	770005-2	770248-2	—	—
		Phos. Brz./Pre-tin	—	—	770006-3	770249-3
		Phos. Brz./Duplex[2]	770005-4	—	770006-4	770249-4
12-10 [3.0-5.0]	**.200 max.**[1] 5.08	Phos. Brz./Pre-tin	770003-3	—	770004-3	—
		Phos. Brz./Duplex[2]	770003-4	770246-4	770004-4	770247-4

[1]No insulation barrel. Insulation maximum diameter is limited by the housing. Use of strain relief is recommended.
[2]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area and .000050 [.00127] min. tin-lead in crimp area over .000050 [.00127] min. nickel underplate on entire contact.

Grounding Pin

(Mate first, break last, not for interrupting current)

Solid Pin Diameter — .084 [2.13] .100 [2.54] longer than standard pin
Stock Thickness — .012 [.304]



Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Contact Part Numbers
			Strip Form
20-14 [.5-2.0]	**.060-.130** 1.52-3.30	Brass. Pre-tin	770193-1

Contact Insertion Tool

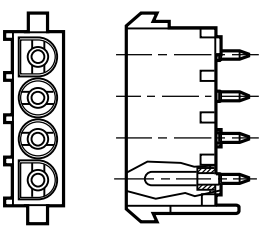
(For inserting contacts applied to small diameter wire)

Part No. 91002-1

High Current Vertical Pin Headers

Material

Housing — UL 94V-0 Nylon
Contacts — Copper Alloy
Finish — Silver



No. of Circuits	Part Numbers
2	194009-1
3	194017-1
4	194010-1
5	194018-1

Universal MATE-N-LOK II Connectors

Pin and Socket Connectors (Continued)

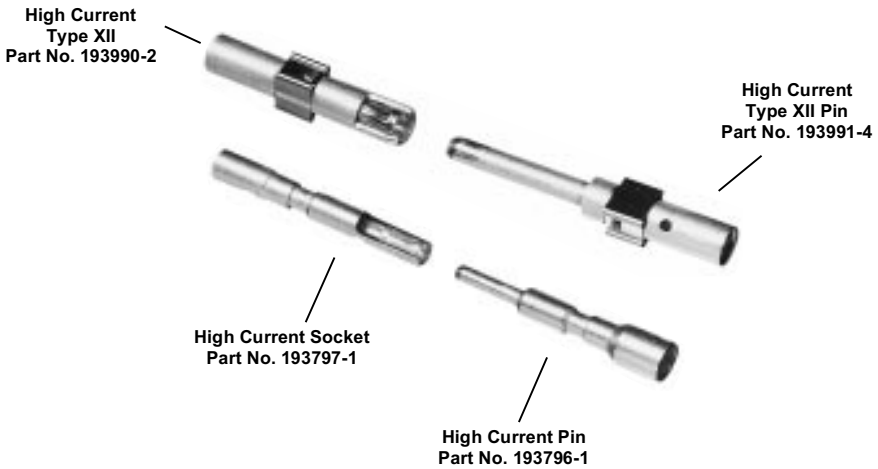
High Current Contacts
Cable-to-Cable

Material

Body — Copper Alloy
Louvertac Band — Beryllium Copper
Retention Spring — Stainless Steel

Finish

Body — Silver
Louvertac Band — Gold



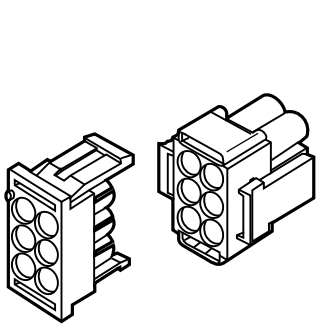
Wire Size AWG	Contact Part Numbers	
	Pin	Sockets
10	193796-1	193797-1
12-14	193841-1	193842-1
	193991-4[1]	193990-2[1]

[1]With Retention Spring

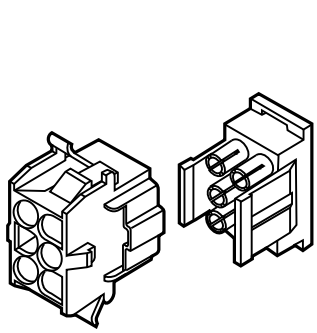
Housing Components
Free Hanging or Panel Mount

.250 [6.35] Centerline spacing

Material — Nylon
Flammability Rating — UL 94V-0



Plug Housing



Cap Housing

Number of Circuit	Kit Component Part Numbers					
	Plug			Cap		
	Kit	Front	Rear	Kit	Front	Rear
2	770017-1	770031-1	770032-1	770024-1	770045-1	770046-1
3	770018-1	770033-1	770034-1	770025-1	770047-1	—
4	770019-1	770035-1	770036-1	770026-1	770049-1	770050-1
5	770016-1	—	—	—	—	—
6	770020-1	770037-1	770038-1	770027-1	770051-1	770052-1
9	770021-1	770039-1	770040-1	770028-1	—	770054-1
12	770022-1	770041-1	770042-1	770029-1	770055-1	770056-1
15	770023-1	770043-1	770044-1	770030-1	770057-1	770058-1

Notes:
1. Kits consist of a front and rear component.
2. Kit components can be purchased separately.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

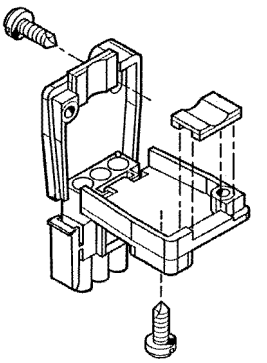
Universal MATE-N-LOK II Connectors

Pin and Socket Connectors (Continued)

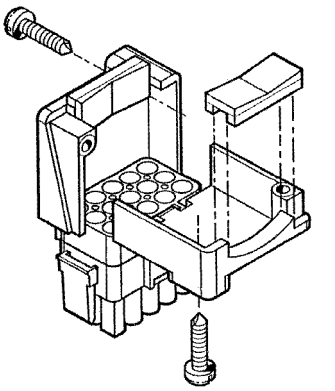
Plug or Cap Housing Strain Reliefs

Material — Nylon

Flammability Rating — UL 94V-0



In-Line

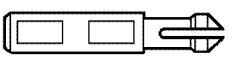


Matrix

Style	Number of Circuits	Insert Supplied	Single Wire Dia. Range	Wire Bundle Dia. Range	Strain Relief Part Numbers
In-Line	2	Yes	**.040 – .190** 1.02 – 4.83	—	640713-1
		No	—	**.200 – .350** 5.08 – 8.89	640713-2
	3	Yes	**.040 – .190** 1.02 – 4.83	—	640714-1
		No	—	**.200 – .350** 5.08 – 8.89	641945-1
	4	Yes	**.040 – .190** 1.02 – 4.83	—	641776-1
		No	—	**.200 – .350** 5.08 – 8.89	641776-2
	5	Yes	**.040 – .190** 1.02 – 4.83	—	643030-1
		No	—	**.200 – .350** 5.08 – 8.89	643030-4
Matrix	6	Yes	—	**.120 – .650** 3.05 – 16.51	640715-1
	9	Yes	—	**.120 – .650** 3.05 – 16.51	640716-1
	12	Yes	—	**.150 – .750** 3.81 – 19.05	640717-1
	15	Yes	—	**.200 – .850** 5.08 – 21.59	640718-1

Notes:
1. Insert comes attached to strain relief. It can be used to provide additional adjustment for small wire bundles or discarded.
2. Insert to be positioned as shown by dotted lines.
3. Strain relief part number represents one-half of a strain relief. Two of a part number are required for one connector.

Keying Plug



Part No. 770377-1

Material — UL 94V-0, Nylon

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal MATE-N-LOK II and Universal MATE-N-LOK Connectors

PC Board Vertical Pin Headers

Centerline Spacing — .250 [6.35]
Solder Tail Diameter — .062 [1.57]

Material

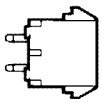
Housing —
UL 94V-2 Nylon, natural color
UL 94V-0 Nylon
Contacts — Phosphor bronze

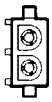
Mating Connectors

Universal MATE-N-LOK
Plug Housings — pg. 304
Universal MATE-N-LOK II
Plug Housings — pg. 297

Pin and Socket Connectors (Continued)

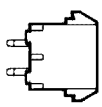
2, 3, 4, 5, 6 and 8 Circuit, In-Line

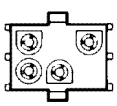




Number of Circuits	Flammability Rating	Pin Finish	Pin Header Part Numbers: Standard Tail[2]	Pin Header Part Numbers: Standard Tail Polarized[2]	Pin Header Part Numbers: Long Tail[3]	Mates with Plug Housing Part Number (Using Socket Contacts): UMNL	Mates with Plug Housing Part Number (Using Socket Contacts): UMNL II
2	UL 94V-2	Pre-tin	350428-1	—	350582-1	1-480698-0	—
		Duplex[1]	350428-2	—	350582-2		
	UL 94V-0	Pre-tin	350786-1	641964-1 1-641964-1[4]	350787-1	350777-1	770017-1
		Duplex[1]	350786-2	—	350787-2		
3	UL 94V-2	Pre-tin	350429-1	641965-1	350583-1	1-480700-0	—
		Duplex[1]	350429-2	—	350583-2		
	UL 94V-0	Pre-tin	350789-1	641966-1 1-641966-1[4]	350790-1	350766-1	770018-1
		Duplex[1]	350789-2	—	350790-2		
4	UL 94V-2	Pre-tin	350430-1	641967-1	350584-1	1-480702-0	—
		Pre-tin	—	—	—		
		Duplex[1]	350430-2	—	350584-2		
	UL 94V-0	Pre-tin	350792-1	641968-1	350793-1	350779-1	770019-1
		Duplex[1]	350792-2	—	350793-2		
5	UL 94V-2	Pre-tin	640466-1	643405-1	—	1-480763-0	—
		Duplex[1]	—	—	—		
	UL 94V-0	Pre-tin	640900-1	643406-1	—	350809-1	770016-1
		Duplex[1]	640900-2	—	—		
6	UL 94V-2	Pre-tin	641832-1	643407-1	—	640585-1	—
	UL 94V-0	Pre-tin	641831-1	643408-1	—	640581-1	—
8	UL 94V-2	Pre-tin	641825-1	—	770143-1	640586-1	—
	UL 94V-0	Pre-tin	641828-1	643410-1	770272-1	640582-1	—

6, 9, 12 and 15 Circuit, Matrix





Number of Circuits	Flammability Rating	Pin Finish	Pin Header Part Numbers: Standard Tail[2]	Pin Header Part Numbers: Standard Tail Polarized[2]	Pin Header Part Numbers: Long Tail[3]	Mates with Plug Housing Part Number (Using Socket Contacts): UMNL	Mates with Plug Housing Part Number (Using Socket Contacts): UMNL II
6	UL 94V-2	Pre-tin	350431-1	641969-1 —	350585-1	1-480704-0	—
		Duplex[1]	350431-2	—	350585-2		
	UL 94V-0	Pre-tin	350711-1	641970-1 —	350732-1	350715-1	770020-1
		Duplex[1]	350711-2	641970-2	350732-2		
9	UL 94V-2	Pre-tin	350432-1	641971-1	350586-1	1-480706-0	—
		Duplex[1]	350432-2	—	350586-2		
	UL 94V-0	Pre-tin	350712-1	641972-1 1-641972-1[4]	350742-1	350720-1	770021-1
		Duplex[1]	350712-2	—	350742-2		
12	UL 94V-2	Pre-tin	350433-1	641973-1	350587-1	1-480708-0	—
		Duplex[1]	350433-2	—	—		
	UL 94V-0	Pre-tin	350713-1	641974-1 —	350737-1	350735-1	770022-1
		Duplex[1]	350713-2	—	350737-2		
15	UL 94V-2	Pre-tin	350434-1	641975-1	350588-1	1-480710-0	—
		Duplex[1]	350434-2	—	350588-2		
	UL 94V-0	Pre-tin	350714-1	641976-1	350738-1	350736-1	770023-1
		Duplex[1]	350714-2	—	350738-2		

[1]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area, matte tin-lead on solder tail end over .000050 [.00127] min. nickel underplate on entire contact.
[2]Use Standard Tail for .062 [1.57] thick PC Board.
[3]Use Long Tail for .125 [3.18] thick PC Board.
[4]Black in color.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal MATE-N-LOK II and Universal MATE-N-LOK Connectors

PC Board Vertical Socket Headers

Centerline Spacing — .250 [6.35]
Solder Tail Diameter — .062 [1.57]

Material

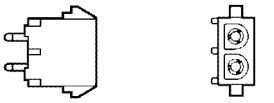
Housing —
UL 94V-2 Nylon, natural color
UL 94V-0 Nylon
Contacts — Phosphor bronze

Mating Connectors

Universal MATE-N-LOK —
Plug Housings — pg. 304
Universal MATE-N-LOK II —
Plug Housings — pg. 297

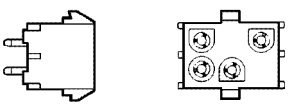
Pin and Socket Connectors (Continued)

2, 3, 4, 5, and 6 Circuit, In-Line



Number of Circuits	Flammability Rating	Socket Finish	Socket Header Part Numbers			Mates with Plug Housing Part Number (Using Pin Contacts)	
			Standard Tail[2]	Standard Tail Polarized[2]	Long Tail[3]	UMNL	UMNL II
2	UL 94V-2	Pre-tin	350759-4	643411-1	—	1-480698-0	—
		Duplex[1]	350759-3	—	—		
	UL 94V-0	Pre-tin	350824-1	643412-1	350831-1	350777-1	770017-1
		Duplex[1]	350824-2	—	—		
3	UL 94V-2	Pre-tin	350760-4	643413-1	—	1-480700-0	—
		Duplex[1]	350760-3	—	—		
	UL 94V-0	Pre-tin	350825-1	643414-1	350832-1	350766-1	770018-1
		Duplex[1]	350825-2	—	350832-2		
4	UL 94V-2	Pre-tin	350761-4	643415-1	350988-4	1-480702-0	—
		Duplex[1]	350761-3	—	—		
	UL 94V-0	Pre-tin	350826-1	643416-1	350833-1	350779-1	770019-1
		Duplex[1]	350826-2	—	350833-2		
5	UL 94V-2	Pre-tin	640467-1	—	—	1-480763-0	—
	UL 94V-0	Pre-tin	640901-1	—	—	350809-1	770016-1
		Duplex[1]	640901-2	—	—		
6	UL 94V-0	Duplex[1]	770262-2	—	—	640581-1	—

6, 9, 12 and 15 Circuit, Matrix



Number of Circuits	Flammability Rating	Socket Finish	Socket Header Part Numbers			Mates with Plug Housing Part Number (Using Pin Contacts)	
			Standard Tail[2]	Standard Tail Polarized[2]	Long Tail[3]	UMNL	UMNL II
6	UL 94V-2	Pre-tin	350762-4	643423-1	350989-4	1-480704-0	—
		Duplex[1]	350762-3	—	—		
	UL 94V-0	Pre-tin	350827-1	643424-1	350834-1	350715-1	770020-1
		Duplex[1]	350827-2	—	350834-2		
9	UL 94V-2	Pre-tin	350763-4	—	350990-4	1-480706-0	—
		Duplex[1]	350763-3	—	—		
	UL 94V-0	Pre-tin	350828-1	643426-1	350835-1	350720-1	770021-1
		Duplex[1]	—	—	350835-2		
12	UL 94V-2	Pre-tin	350764-4	—	350991-4	1-480708-0	—
		Duplex[1]	350764-3	—	—		
	UL 94V-0	Pre-tin	350829-1	643428-1	—	350735-1	770022-1
		Duplex[1]	350829-2	—	—		
15	UL 94V-2	Pre-tin	350765-4	643429-1	—	1-480710-0	—
		Duplex[1]	350765-3	—	—		
	UL 94V-0	Pre-tin	350830-1	643430-1	350837-1	350736-1	770023-1
		Duplex[1]	350830-2	—	—		

[1]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area, matte tin-lead on solder tail end over .000050 [.00127] min. nickel underplate on entire contact.
[2]Use Standard Tail for .062 [1.57] thick PC Board.
[3]Use Long Tail for .125 [3.18] thick PC Board.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

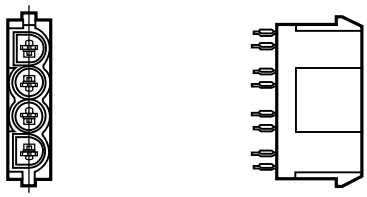
Universal MATE-N-LOK II and Universal MATE-N-LOK Connectors

Pin and Socket Connectors (Continued)

PC Board Vertical Pin Headers with ACTION PIN Contacts

Material

Housing — PBT, black
Flammability Rating — UL 94V-0
Contacts — Copper alloy, plated with tin-lead over nickel on entire contact



Number of Circuits	Part Number	Mates with Housing Part Number (Using Socket Contacts)	
		UMNL	UMNL II
2	173924-1	1-480698-0 350777-1	770017-1
3	173925-1	1-480700-0 350766-1	770018-1
4	173926-1	1-480702-0 350779-1	770019-1

Note: Install in PC Board with arbor press.

PC Board Right Angle Pin and Socket Headers

Centerline Spacing — .250 [6.35]
Solder Tail Width — .052 [1.32]

Material

Housing — Nylon
Contacts — Phosphor Bronze

2, 3, 4, 5, 6 and 8 Circuit, In-line

No. of Circuits	Contact Finish	Right Angle Header Part Numbers						
		UL 94V-2			UL 94V-0			
		Pin	Socket	Mates with	Pin	Socket	Mates with	
							UMNL	UMNL II
2	Pre-tin	—	—	—	1-350942-0	643226-1	350777-1	770017-1
	Duplex[1]	—			2-350942-0	—		
3	Pre-tin	—	—	—	1-350943-0	643228-1	350766-1	770018-1
	Duplex[1]	—			2-350943-0	—		
4	Pre-tin	1-350948-0	—	1-480702-0	1-350944-0	643230-1	350779-1	770019-1
	Duplex[1]	—			2-350944-0	—		
5	Pre-tin	1-350949-0	—	1-480763-0	1-350945-0	643232-1	350809-1	770016-1
	Duplex[1]	—			2-350945-0	—		
6	Pre-tin	640587-1	643235-1	—	640583-1	643234-1	640581-1	—
	Duplex[1]	—			640583-2	—		
8	Pre-tin	—	643237-1	—	640584-1	643236-1	640582-1	—
	Duplex[1]	—			640584-2	—		

[1]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area, matte tin-lead on solder tail end over .000050 [.00127] min. nickel underplate on entire contact.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal MATE-N-LOK Connectors

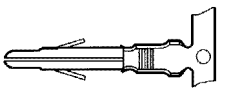
Solid Contacts (Used in either Universal MATE-N-LOK Plug or Cap housings on page 304)

Solid Pin Diameter — .084 [2.13]
Stock Thickness — .012 [0.305]
unless otherwise noted

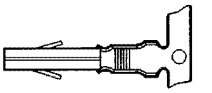
Material and Finish

See chart at right

Pin and Socket Connectors (Continued)



Pin



Socket

Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Part Numbers			
			Pin		Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
30-26 [.05-.12]	**.032-.057** .813-1.45	Brass/Pre-tin	350924-1	—	350925-1	770673-1
		Phos. Brz./Gold[2]	—	770672-6	—	—
24-18 [.2-.8]	**.040-.100** 1.02-2.54	Brass/Pre-tin	350561-1	350690-1	350851-1 350570-1[1]	350689-1[1]
		Brass/Gold[2]	350561-2	350690-2	350851-2 350570-2[1]	640347-2 350689-2[1]
		Brass/Sel. Gold[3]	350561-7	350690-7	350851-7 350570-7[1]	350689-7[1]
		Phos. Brz./Pre-tin	350561-3	350690-3	350570-3[1]	350689-3[1]
		Phos. Brz./Sel. Gold[3]	—	—	350570-6[1]	—
20-14 [.5-2.0]	**.060-.130** 1.52-3.30	Brass/Pre-tin	350218-1	350547-1	350536-1	350550-1
		Brass/Gold[2]	350218-2	350547-2	350536-2	350550-2
		Brass/Sel. Gold[3]	350218-7	350547-7	350536-7	350550-7
		Phos. Brz./Pre-tin	350218-3	350547-3	350536-3	350550-3
		Phos. Brz./Sel. Gold[3]	350218-6	350547-6	350536-6	350550-6
20-14 [.5-2.0]	**.130-.200** 3.30-5.08	Brass/Pre-tin	350538-1	350552-1	350537-1	350551-1
		Brass/Gold[2]	350538-2	350552-2	350537-2	350551-2
		Brass/Sel. Gold[3]	350538-7	350552-7	350537-7	350551-7
		Phos. Brz./Pre-tin	350538-3	350552-3	350537-3	350551-3
		Phos. Brz./Sel. Gold[3]	350538-6	—	350537-6	350661-6
18-14[4] [.8-2.0]	**.130-.200** 3.30-5.08	Brass/Pre-tin	350873-1	—	350874-1	—
		Phos. Brz./Pre-tin	350873-3	350918-3	350874-3	350919-3
12-10 [3.0-5.0]	**.200 max.**[5] 5.08	Phos. Brz./Pre-tin	350922-3	—	350923-3	640310-3
		Phos. Brz./Sel. Gold[3]	350922-6	640309-6	—	—

[1]Socket Contact — .010 [.254] stock thickness
[2]Gold Finish — Plated with .000030 [.000762] min. gold in mating area and inside wire barrel over .000050 [.00127] min. nickel underplate on entire contact.
[3]Select Gold Finish — Plated with .000030 [.000762] min. gold in mating area over .000050 [.00127] min. nickel underplate on entire contact.
[4]Recommended for predominant use of 14 AWG wire.
[5]No insulation barrel. Insulation maximum diameter is limited by the housing. Use of strain relief is recommended.

Contact Insertion Tool

(For inserting contacts applied to small diameter wire)

Part No. 91002-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

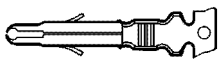
Universal MATE-N-LOK Connectors

Pin and Socket Connectors (Continued)

Split Contact — Pins

Solid Pin Diameter — .084 [2.13]
Split Pin Diameter — .086 [2.18]
Stock Thickness — .012 [0.305]

These contacts can be used in either Universal MATE-N-LOK Plug or Cap housings only.



Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Contact Part Number	
			Strip Form	Loose Form
24-18 [.2-.8]	**.040-.100** 1.02-2.54	Brass, Pre-tin	350699-1	350706-1
		Brass, Gold[1]	350699-2	350706-2
		Brass, Select Gold[2]	350699-7	350706-7
20-14 [.5-2.0]	**.060-.130** 1.52-3.30	Brass, Pre-tin	350687-1	350705-1
		Brass, Gold[1]	350687-2	350705-2
		Brass, Select Gold[2]	350687-7	350705-7
20-14 [.5-2.0]	**.130-.200** 3.30-5.08	Brass, Pre-tin	350700-1	350707-1
		Brass, Select Gold[2]	350700-7	—

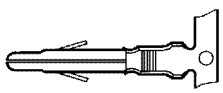
[1]Gold Finish — Plated with .000030 [.000762] min. gold in mating area and inside wire barrel over .000050 [.00127] min. nickel underplate on entire contact.
[2]Select Gold Finish — Plated with .000030 [.000762] min. gold in mating area over .000050 [.00127] min. nickel underplate on entire contact.

Notes:
1. AMP recommends split pins be used in housings having 6, 9, 12 and 15 circuits to reduce mating force.
2. Phosphor bronze material contacts are available for use in high temperature/humidity cycling applications, consult AMP.

Grounding Contacts — Pins

(Mate first, break last, not for interrupting current)

.100 [2.54] longer than standard pin



Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Contact Part Number	
			Strip Form	Loose Form
24-18 [.2-.8]	**.060-.130** 1.52-3.30	Brass, Pre-tin	770210-1	—
20-14 [.5-2.0]	**.060-.130** 1.52-3.30	Brass, Pre-tin	350654-1	350669-1

Universal MATE-N-LOK Connectors

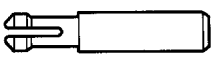
Housings — In-Line and Matrix
(Free Hanging or Panel Mount)

Centerline Spacing — .250 [6.35]
Contacts — Order separately (see pages 302, 303 and 306)

Material
Nylon (See chart at right)

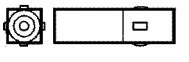
Mating Headers
See pages 299, 300 and 301

Keying Plug

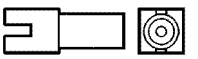


Part Numbers
UL 94V-2 Nylon material, natural color — **1-640415-1**
UL 94V-0 Nylon material — **1-640415-0**
Note: Keying plug snaps into plug or cap housing

Pin and Socket Connectors (Continued)

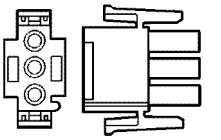


Plug

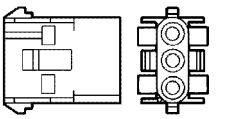


Cap

1 Circuit (Free Hanging)

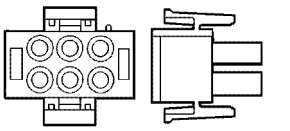


Plug

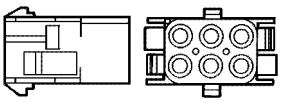


Cap

2, 3, 4, 5, 6, 8 Circuit In-Line



Plug

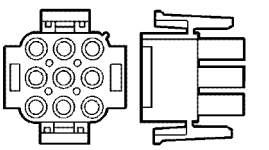


Cap

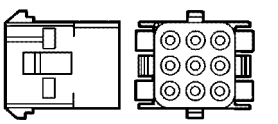
6 Circuit Matrix

No. of Circuits	Part Numbers			
	UL 94V-2 Nylon		UL 94V-0 Nylon	
	Plug	Cap	Plug	Cap
1	1-350867-0	1-770421-1	350865-1	350866-1
2	1-480698-0[1]	1-480699-0[1]	350777-1[1]	350778-1[1]
3	1-480700-0[1]	1-480701-0[1]	350766-1[1]	350767-1[1]
4	1-480702-0[1]	1-480703-0[1]	350779-1[1]	350780-1[1]
5	1-480763-0[1]	1-480764-0[1]	350809-1[1]	350810-1[1]
6	640585-1[1]	1-926307-1[1]	640581-1[1]	350781-1
	1-480704-0	1-480705-0	350715-1	
8	1-640586-1[1]	1-926308-1[1]	640582-1[1]	926308-3[1]
9	1-480706-0	1-480707-0	350720-1	350782-1
12	1-480708-0	1-480709-0	350735-1	350783-1
15	1-480710-0	1-480711-0	350736-1	350784-1

[1] In-Line style



Plug



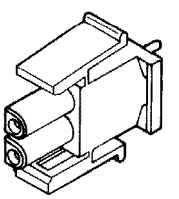
Cap

9, 12, 15 Circuit Matrix

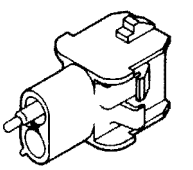
Test Connectors (with spring loaded contacts)

Material
Housing — Nylon
Flammability Rating — UL 94V-0

2, 3, 4 and 5 Circuit, In-Line



Plug



Cap

Number of Circuits	Part Numbers	
	Plug	Cap
2	350848-2	—
3	—	350849-3
4	350848-4	—

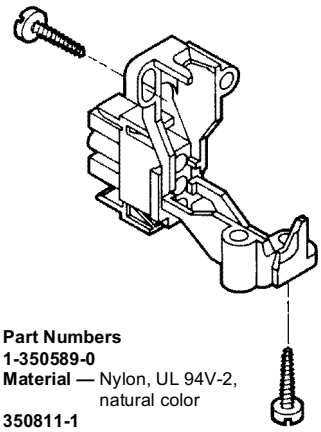
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal MATE-N-LOK Connectors

Pin and Socket Connectors (Continued)

Plug Housing Strain Reliefs

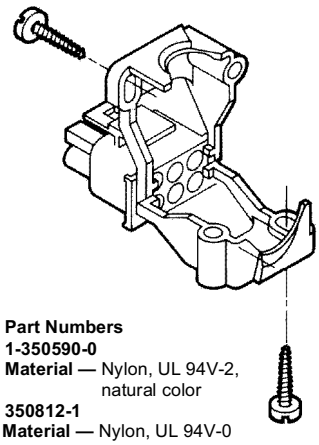
2, 3, 4, 5, 6 and 8 Circuit, In-Line



Part Numbers
1-350589-0
Material — Nylon, UL 94V-2, natural color
350811-1
Material — Nylon, UL 94V-0

Note: Strain relief part number represents one half of a strain relief. Two strain reliefs required per housing.

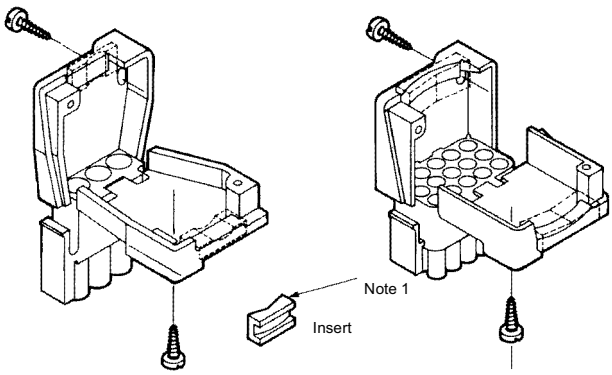
6, 9, 12 and 15 Circuit, Matrix



Part Numbers
1-350590-0
Material — Nylon, UL 94V-2, natural color
350812-1
Material — Nylon, UL 94V-0

Plug or Cap Housing Strain Reliefs

2, 3, 4, 5, 6, 8, 9, 12 and 15 Circuit (Enclosed)

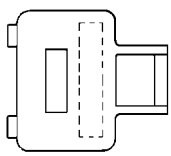


In-Line **Matrix**

See Table Below

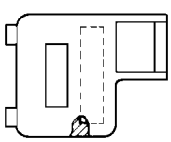
Cap Housing Adapters

For All Positions Except 2, 6 and 8 Circuit Cap Housings



Part Numbers
641777-1
Material — Nylon, UL 94V-2, natural color
641778-1
Material — Nylon, UL 94V-0

For 2 In-Line and 6 Matrix Circuit Cap Housings Only



Part Numbers
643182-1
Material — Nylon, UL 94V-2, natural color
643182-2
Material — Nylon, UL 94V-0

Style	Number of Circuits	Insert Supplied	Single Wire Dia. Range	Wire Bundle Dia. Range	Part Numbers (Enclosed)	
					UL 94V-2 Nylon, Natural Color	UL 94V-0 Nylon
In-Line	2	Yes	**.040-.190** 1.02-4.83	—	1-640719-0	640713-1
		No	—	**.200-.350** 5.08-8.89	1-640719-1	640713-2
	3	Yes	**.040-.190** 1.02-4.83	—	1-640720-0	640714-1
		No	—	**.200-.350** 5.08-8.89	641763-1	641945-1
	4	Yes	**.040-.190** 1.02-4.83	—	641775-1	641776-1
		No	—	**.200-.350** 5.08-8.89	641775-2	641776-2
	5	Yes	**.040-.190** 1.02-4.83	—	643030-3	643030-1
		No	—	**.200-.350** 5.08-8.89	643030-2	643030-4
	6 Note 5	No	—	**.200-.350** 5.08-8.89	—	643313-2
	8 Note 5	Yes	**.040-.190** 1.02-4.83	—	—	643314-1
Matrix	6	Yes	—	**.120-.650** 3.05-16.51	1-640721-0	640715-1
	9	Yes	—	**.120-.650** 3.05-16.51	1-640722-0	640716-1
	12	Yes	—	**.150-.750** 3.81-19.05	1-640723-0	640717-1
	15	Yes	—	**.200-.850** 5.08-21.59	1-640724-0	640718-1

Notes:
1. Cable clamping insert comes attached to strain relief. It can be used to provide additional adjustment for small wire bundles or discarded.
2. Insert to be positioned as shown by dotted lines.
3. **Strain relief part number represents one-half of a strain relief. Two strain reliefs required per housing.**
4. Must use cap housing adapters when attaching strain reliefs to a cap housing. **Two adapters required per housing.**
5. Strain reliefs for 6 and 8 position In-Line fits plug housings only.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Universal MATE-N-LOK Connectors

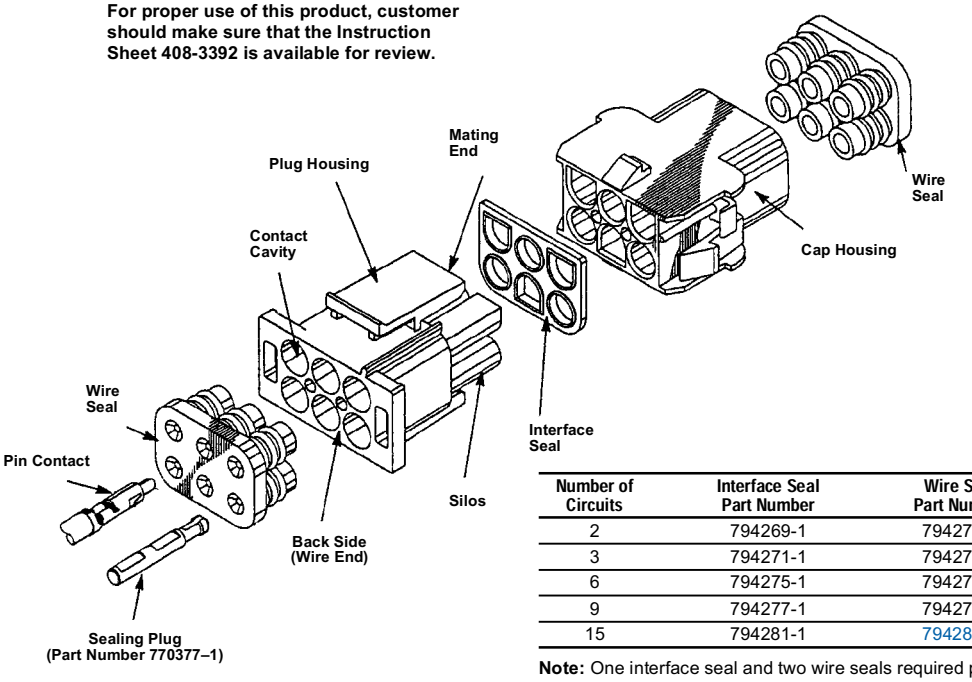
Pin and Socket Connectors (Continued)

Connector Seals

Material

Silicone rubber, blue color

For proper use of this product, customer should make sure that the Instruction Sheet 408-3392 is available for review.



Number of Circuits	Interface Seal Part Number	Wire Seal Part Number
2	794269-1	794270-1
3	794271-1	794272-1
6	794275-1	794276-1
9	794277-1	794278-1
15	794281-1	794282-1

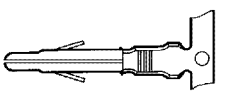
Note: One interface seal and two wire seals required per mated assembly.

Contacts used with Splash Proof Seals

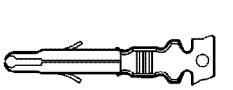
Solid Pin Diameter — .084 [2.13]
Split Pin Diameter — .086 [2.18]
Stock Thickness — .012 [.305] unless otherwise noted.

These contacts can be used in either Universal MATE-N-LOK Plug or Cap housings only.

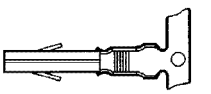
Notes:
1. AMP recommends split pins be used in housings having 6, 9, 12 and 15 circuits to reduce mating force.
2. Phosphor bronze material contacts are available for use in high temperature/humidity cycling applications, consult AMP.
3. 18-24 AWG contacts page 302 can be used with splash proof seals if insulation diameter range is .060-.100.



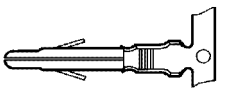
Solid Pin



Split Pin



Solid Socket

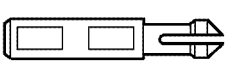


Grounding Pin
(.100 [2.54] longer than standard pin)
(Mate first, break last, not for interrupting current)

Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Style	Contact Part Numbers			
				Pin		Socket	
				Strip Form	Loose Form	Strip Form	Loose Form
20-14 [.5-2.0]	**.060-.130** 1.52-3.30	Brass, Pre-tin	Solid	350218-1	350547-1	350536-1	350550-1
		Brass, Gold[1]		350218-2	350547-2	350536-2	350550-2
		Brass, Select Gold[2]		350218-7	350547-7	350536-7	350550-7
		Phos. Brz., Pre-tin		350218-3	350547-3	350536-3	350550-3
		Phos. Brz., Select Gold[2]		350218-6	350547-6	350536-6	350550-6
		Brass, Pre-tin	Split	350687-1	350705-1	—	—
		Brass, Gold[1]		350687-2	350705-2	—	—
		Brass, Select Gold[2]		350687-7	350705-7	—	—
		Brass, Pre-Tin	Ground	350654-1	350669-1		

[1]Gold Finish—Plated with .000030 [.000762] min. gold in mating area and inside wire barrel over .000050 [.00127] min. nickel underplate on entire contact.
[2]Select Gold Finish—Plated with .000030 [.000762] min. gold in mating area over .000050 [.00127] min. nickel underplate on entire contact.

UMNL II Keying Plug/ Splash Proof Sealing Plug



Material

UL 94V-0 Nylon material

Part Number 770377-1

Contact Insertion Tool

(For inserting contacts applied to small diameter wire)
Part No. 91002-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Commercial MATE-N-LOK Connectors

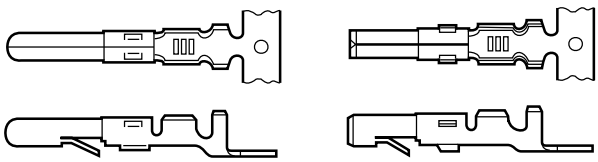
Pin and Socket Connectors (Continued)

Contacts (Used in Commercial MATE-N-LOK housings on page 308)

Pin Diameter — .084 [2.13]
Stock Thickness — .012 [0.305]

Material and Finish

Brass or phosphor bronze with pre-tin plating or brass selectively plated .000030 [0.00076] min. gold in mating area over 0.000050 [0.00127] nickel underplate on entire contact

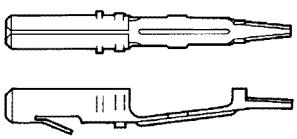


Pin Socket

Wire Size Range AWG [mm²]	Ins. Dia. Range	Materials & Finish	Part Numbers			
			Pin		Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
30-22 [.05-.3]	**.040-.075** 1.02-1.91	Brass/Pre-tin	350079-1	61174-1	350078-1	61173-1
		Phos. Brz./Pre-tin	350079-4	—	—	61173-4
		Brass/Gold[1]	350079-5	61174-5	—	—
24-18 [.2-.8]	**.060-.100** 1.52-2.54	Brass/Pre-tin	61116-1	60618-1	61314-1	60617-1
		Phos. Brz/Pre-tin	61116-4	60618-4	61314-4	60617-4
		Brass/Gold[1]	61116-5	60618-5	61314-5	60617-5
		Phos. Brz./Sel. Gold[2]	61116-6	60618-6	61314-6	60617-6
		Brass/Sel. Gold[2]	61116-7	—	—	—
20-14 [.5-2.0]	**.100-.130** 2.54-3.30	Brass/Pre-tin	61118-1	60620-1	61117-1	60619-1
		Phos. Brz./Pre-tin	61118-4	60620-4	61117-4	60619-4
		Brass/Gold[1]	61118-5	60620-5	61117-5	60619-5
		Phos. Brz./Gold[1]	—	—	61117-6	60619-7
(2) 18 [.8] or (1) 18 [.8] & (1) 16 [1.2]	(2) **.115 Max.** 2.92 (stacked)	Brass/Pre-tin	350558-1	350639-1	350557-1	—
		Phos. Brz./Pre-tin	—	—	350557-4	350638-4

[1]Gold Finish — Plated with .000030 [.000762] min. gold in mating area and inside wire barrel over .000050 [.00127] min. nickel underplate on entire contact.
[2]Select Gold Finish — Plated with .000030 [.000762] min. gold in mating area over .000050 [.00127] min. nickel underplate on entire contact.

Notes:
1. Extraction Tools: Pins — No. **1-305183-1** (IS 408-7158); Sockets — No. **1-305183-2** (IS 408-7158); Pins and Sockets — No. 465644-1 (IS 408-7211)
2. Insertion Tools: No. **455830-1** (IS 408-7984)

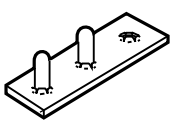


PC Board Socket

Type of Contact	Material & Finish	Part Numbers	
		Pin	Socket
		Loose Form	Loose Form
Pc Board	Phos. Brz., Pre-tin	—	61320-1[1]
	Phos. Brz., Pre-tin	—	350073-1[2]

[1]For .062 [1.57] max. board thickness — Board hole size .057 [1.45]
[2]For .125 [3.14] max. board thickness — Board hole size .057 [1.45]

Commoning Tabs



Material and Finish

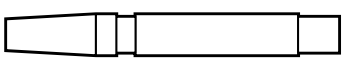
Brass, tin plated

Stock Thickness — .008 [.203]

Number of Holes	Part Number
2	60843-1
2	350444-1
3	60842-1
3	350444-2

Note: Commoning tabs are designed to be used with pin housings.

Keying Plug



Material

Housing — Nylon, natural color
Flammability Rating — UL 94V-2

Part Number 200821-1
Note: Keying plug snaps into socket housing

Commercial MATE-N-LOK Connectors

Pin and Socket Connectors (Continued)

Housings — Free Hanging

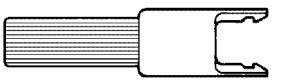
Centerline Spacing — .200 [5.08]
Contacts — Order separately (see page 307)

Material

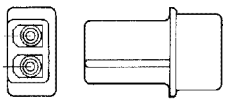
Nylon, UL 94V-2, natural color

Mating Headers

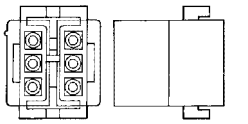
Pages 309 and 310



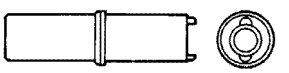
Pin Housing (Cap)



Pin Housing (Cap)

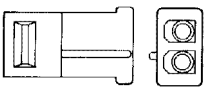


Pin Housing (Cap)



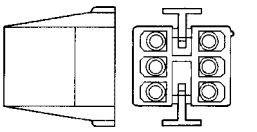
Socket Housing (Plug)

1 Circuit



Socket Housing (Plug)

2, 3, 4 Circuit In-Line

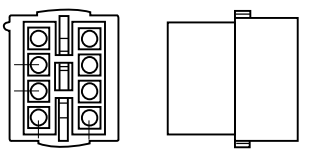


Socket Housing (Plug)

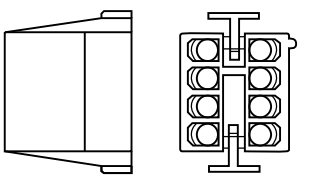
6 Circuit Dual Row

No. of Circuits	Part Numbers	
	Pin Housing (Cap)	Receptacle Housing (Plug)
1	1-480350-0[1]	1-480349-0
	1-480351-0[2]	—
	1-480401-0[1,3]	1-480400-0[3]
2	1-480319-0[1,4]	1-480318-0[4]
	1-480498-1[1,3,4]	—
3	—	1-480303-0[4]
	1-480387-0[1,3,4]	1-480388-0[3,4]
4	—	1-480424-0[3,4]
	—	770827-1[4,5,6]
6	1-480340-0	—
8	1-480345-0	—
10	1-480339-0	—

[1]Detent lock
[2]Positive lock
[3]UV Stabler black color
[4]Housing accepts double wire applications where individual insulation diameters do not exceed .115 [2.92]
[5]Used by the disk drive industry
[6]Housing Material UL 94V-0 rated



Pin Housing (Cap)



Socket Housing (Plug)

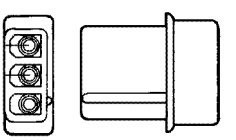
8 Circuit Dual Row

Housings — Panel Mount Positive Lock

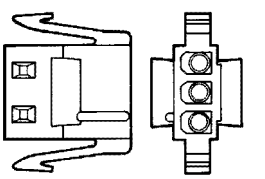
Material

Housing — Nylon, natural color
Flammability Rating — UL 94V-2

3 and 4 Circuit, In-Line

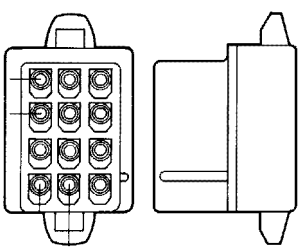


Pin Housing (Cap)

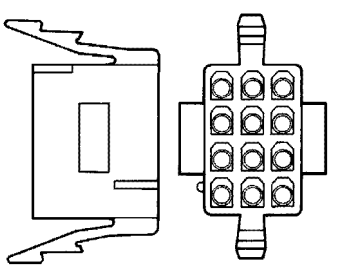


Socket Housing (Plug)

6, 9, 12 and 15 Circuit, Matrix



Pin Housing (Cap)



Socket Housing (Plug)

Number of Circuits	Part Numbers	
	Pin Housing (Cap)	Socket Housing (Plug)
3	1-480305-0[1]	1-480304-0
4	1-480426-0[1,3]	1-480425-0[3]
6	1-480276-0[2]	1-480273-0
9	1-480277-0[2]	1-480274-0
12	1-480278-0[2]	1-480275-0
15	1-480324-0[2]	1-480323-0

[1]Detent lock
[2]Positive lock
[3]Used by disk drive industry

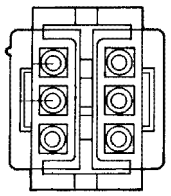
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Commercial MATE-N-LOK Connectors

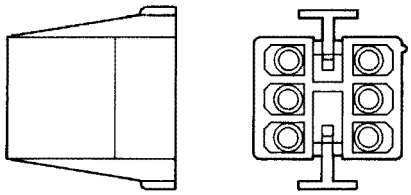
Pin and Socket Connectors (Continued)

Housings — Motor Mount 6, 8, 10, 12 and 16 Circuit, Dual Row, Positive Lock

Material
Housing — Nylon, natural color
Flammability Rating — UL 94V-2



Pin Housing (Cap)



Socket Housing (Plug)

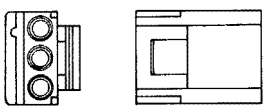
Number of Circuits	Part Numbers	
	Pin Housing (Cap)	Socket Housing (Plug)
6	1-480271-0	1-480270-0[1]
8	1-480284-0	1-480283-0[1]
10	1-480286-0	1-480285-0[1]
12	1-480288-0	1-480287-0
16	1-480439-0	1-480438-0

[1]Housing accepts double wire applications where individual insulation diameters do not exceed .115 [2.92].

Housings — Positive Lock

Centerline Spacing — .200 [5.08]

2, 3, and 4 Circuit, In-Line



Socket Housing (Plug)

No. of Circuits	Part Numbers Socket Housing (Plug)
2	1-480720-0
3	1-480721-0
4	1-480722-0[1]

[1]Used by the disk drive industry.

PC Board Vertical Pin Headers

Centerline Spacing — .200 [5.08]
Solder Tail Diameter — .062 [1.57]

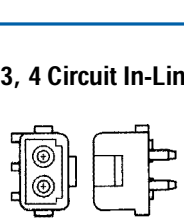
Material
Housing — UL 94V-2 Nylon, natural color
Contacts — Phosphor bronze with pre-tin plating

Mating Connectors
Commercial MATE-N-LOK — Socket Housings on pages 308, above and 310

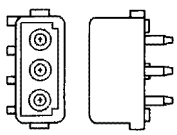
[1]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area, matte tin-lead on solder tail end over .000050 [.00127] min. nickel underplate on entire contact.
[2]Use standard tail for .062 [1.57] thick PC Board.
[3]Use long tail for .125 [3.18] thick PC Board.
[4]Used by the disk drive industry.
[5]With drain holes.

No. of Circuits	Type Lock	Finish	Part Numbers	
			Standard Tail[2]	Long Tail[3]
2	Positive	Pre-tin	350539-1	—
	Detent	Pre-tin	350209-1	350422-1
		Duplex[1]	350209-2	—
3	Positive	Pre-tin	350541-1	—
		Duplex[1]	350541-2	—
	Detent	Pre-tin	350210-1	350423-1
		Duplex[1]	350210-2	—
4	Positive	Pre-tin	350543-1[4]	350544-1[4]
		Duplex[1]	350543-2[4]	—
	Detent	Pre-tin	350211-1[4]	350424-1[4]
			770328-1[4,5]	
		Duplex[1]	350211-2[4]	—
6	Positive	Pre-tin	1-380999-0	350425-1
		Duplex[1]	2-380999-0	—
8	Positive	Pre-tin	350212-1	350426-1
		Duplex[1]	350212-2	—
10	Positive	Pre-tin	1-380991-0	350219-1
		Duplex[1]	2-380991-0	—
12	Positive	Pre-tin	350213-1	350220-1
		Duplex[1]	350213-2	—
16	Positive	Pre-tin	350214-1	350427-1

2, 3, 4 Circuit In-Line

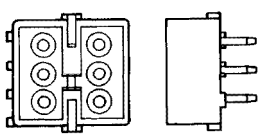


Positive Lock



Detent Lock

6, 8, 10, 12 and 16 Circuit, Dual Row



Positive Lock

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Commercial MATE-N-LOK Connectors

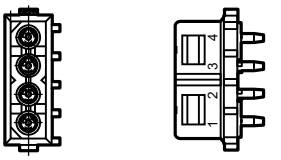
Pin and Socket Connectors (Continued)

PC Board Vertical Socket Headers

Material

Housing — Nylon, natural color
Flammability Rating — UL 94V-2
Contacts — Phosphor bronze
Solder Tail Diameter — .062 [1.57]

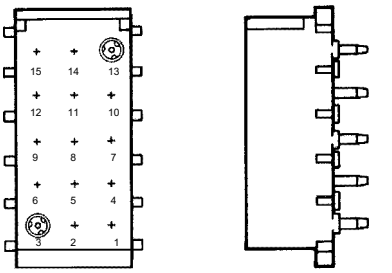
4 Circuit, In-Line



Number of Circuits	Finish	Part Numbers Standard Tail[2]
4	Pre-tin	770997-1[1]
12	Pre-tin	350643-1

[1]Used by the disk drive industry.
[2]Use standard tail for .062 [1.57] thick PC Board.

12 Circuit, Matrix

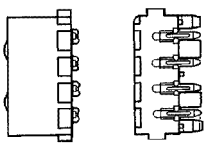


PC Board Right Angle Pin Headers

Material

Contact — Phosphor bronze, Pre-tin
Solder Tail Diameter — .052 [1.32]

3 and 4 Circuit, In-Line



Number of Circuits	Housing Material	Part Numbers
3	UL 94V-0 Nylon	643488-1
4	UL 94V-2 Nylon, Natural Color	641737-1[2] 770846-1[1,2]
	UL 94V-0 Nylon	1-641737-1[2]

[1]Surface Mount Compatible.
[2]Used by the disk drive industry.

Insulation Displacement Connectors (IDC) — 4 Circuit

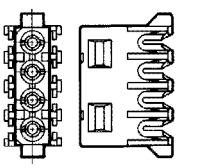
Material

Housing — UL 94V-2, Nylon
Contacts — Phosphor bronze with pre-tin plating or duplex plated .000030 [0.00076] min. gold in mating area over .000050 [0.00127] nickel underplate on entire contact

Mating Connectors

Commercial MATE-N-LOK— Socket Housings on page 308
Commercial MATE-N-LOK — Pin Housings on page 308
Commercial MATE-N-LOK — Pin Headers on page 309

Wire Size Range AWG [mm²]	Color Code	Finish	Part Number UL 94V-2	Part Number UL 94V-0
22 [.3]	Red	Pre-tin	770156-2	—
20 [.5]	Yellow	Pre-tin	770156-4	—
18 [.8]	Orange	Pre-tin	770156-3	794036-1

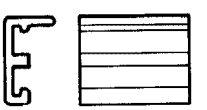


4 Circuit In-Line

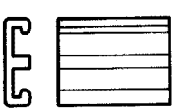
Dust Covers (Use with IDC Connectors above)

Material

Housing — Polyester, UL 94V-2 white color



For Feed-To Wiring Part Number 770232-1



For Feed-Through Wiring Part Number 770233-1

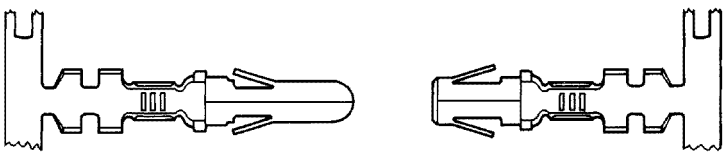
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

.140 MATE-N-LOK Connectors, Large Insulation, .240 [6.1] Centerline

Contacts

Pin Diameter — .140 [3.57]
Stock Thickness — .014 [.357]

Pin and Socket Connectors (Continued)



Pin Socket

Wire Size Range AWG [mm²]	Ins. Dia. Range	Material & Finish	Contact Part Numbers			
			Pin		Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
20-14 [.5-2.0]	**.100-.180** 2.54-4.5	Brass/Pre-tin	61627-1	350389-1	61626-1	350388-1
		Phos. Brz./Pre-tin	61627-2	—	61626-2	—
14-10 [2.0-5.0]	**.100-.180** 2.54-4.5	Brass/Pre-tin	350201-1	350391-1	350200-1	350390-1
		Phos. Brz./Pre-tin	350201-2	—	350200-2	—

Housings

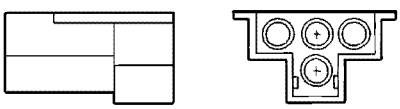
Free Hanging

Centerline Spacing — .240 [6.09]

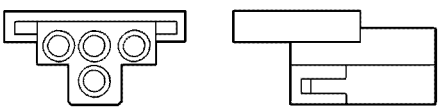
Material

Housing
Nylon, natural color
Flammability Rating — UL 94V-2

4 Circuit

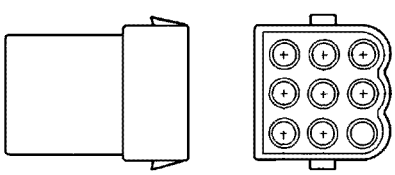


Pin Housing (Cap)
Part No. 1-480512-0

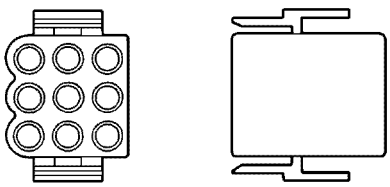


Socket Housing (Plug)
Part No. 1-480510-0

9 Circuit, Matrix



Pin Housing (Cap)
Part No. 1-480586-0



Socket Housing (Plug)
Part No. 1-480585-0

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

.140 MATE-N-LOK Connectors, Large Insulation, .240 [6.1] Centerline

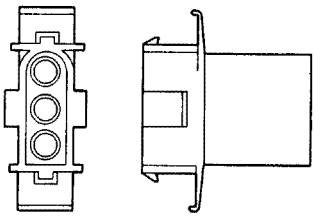
Pin and Socket Connectors (Continued)

Housings
Panel Mount

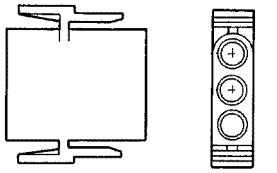
Centerline Spacing — .240 [6.09]

Material
Housing
Nylon, natural color
Flammability Rating — UL 94V-2

2 and 3 Circuit, In-Line

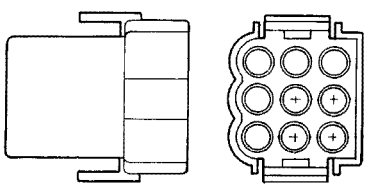


Pin Housing (Cap)

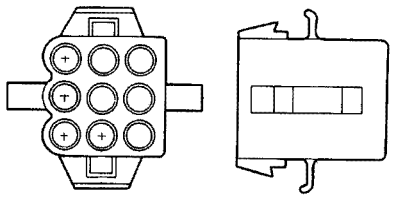


Socket Housing (Plug)

9 Circuit, Matrix



Pin Housing (Cap)



Socket Housing (Plug)

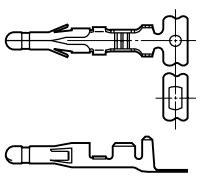
No. of Circuits	Configuration	Part Numbers	
		Pin	Socket
2	In-Line	1-350345-0	1-350344-0
3	In-Line	1-350347-0	1-350346-0
9	Matrix	1-480673-0	1-480672-0

.093 [2.36] Commercial Pin and Socket Connectors

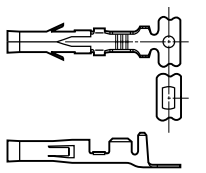
Contacts (Used in plug or receptacle housings below)

Pin Diameter — .093 [2.36]
Stock Thickness — .010 [0.25]

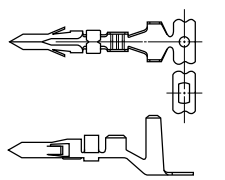
Material and Finish
Brass or phosphor bronze with pre-tin plating



Pin



Socket



Pin Part No. 770385-1

Wire Size Range AWG [mm²]	Insulation Dia.	Material & Finish	Contact Part Numbers	
			Pin	Socket
24-18 0.2-0.9	**.110** 2.79	Brass/Pre-tin	—	350417-1
20-14 0.6-2	**.140** 3.56	Brass/Pre-tin	350416-1	350415-1
		Phos. Brz./Pre-tin	—	350415-6
	.180 4.57	Brass/Pre-tin	770530-1[1]	770529-1[1]
18-14 or 2 (18) 0.8-2 or 2 (0.8-0.9)	**.180** 4.57 (per wire)	Brass/Pre-tin	770385-1[2]	—

[1]Contact length is .875 [22.23]
[2]Contact has .125 [3.18] stock thickness and accepts 2 wires, each with maximum .180 [4.57] insulation diameter.
Note: Phosphor bronze contacts should be used in high-temperature/humidity cycling applications.

Contact Insertion Tool

Part No. 91002-1
(For Pins and Sockets)

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

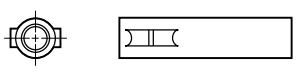
.093 [2.36] Commercial Pin and Socket Connectors

Pin and Socket Connectors (Continued)

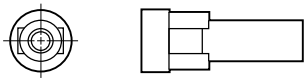
Housings
Free Hanging or Panel Mount

Centerline Spacing — .198 [5.03]
Contacts — Order separately (see above)

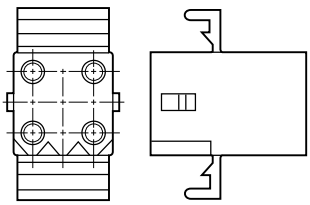
Material
Nylon, UL 94V-2, natural color



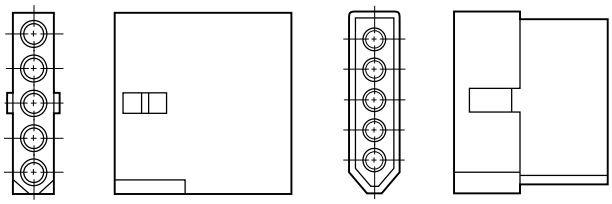
1 Circuit Receptacle



1 Circuit Plug

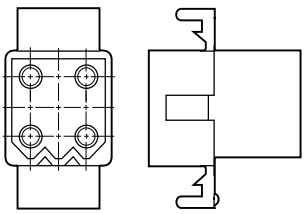


4 Circuit Matrix Receptacle



2, 3, 4, 5 Circuit In-Line Receptacle

2, 3, 4, 5 Circuit In-Line Plug



4 Circuit Matrix Plug

No. of Circuits	Configuration	Receptacle Part Numbers				Plug Part Numbers	
		Panel-Mount		Free-Hanging			
		Without Detents	With Detents	Without Detents	With Detents	Panel-Mount	Free-Hanging
1	—	—	—	—	770063-1	—	770064-1
2	—	—	770066-1[1,3]	—	770065-1[1,3]	770068-1[1]	770069-1[1]
3	—	—	770071-1	770339-1[4]	770070-1	770073-1	770074-1
4	In-Line	770329-1[4]	770076-1	770337-1[4]	770075-1	770330-1[4]	770078-1
4	Matrix	—	—	—	770843-1	—	770842-1
5	—	—	—	—	770083-1	—	770084-1
6	Matrix	770372-1[4]	770087-1	—	770086-1	770089-1	770090-1
						770373-1[4]	770361-1[4]
9	—	—	770093-1	—	770092-1	770095-1[2]	770096-1
12	—	—	770099-1	—	770098-1	770101-1	770102-1
15	—	770103-1	—	770105-1	—	—	770107-1

[1].248 [6.30] Centerline Spacing. [2]Mounting ears at wire end. [3]600V AC or DC. [4].250 [6.35] Centerline Spacing.

Positive Lock

2 and 3 Circuit, In-Line

Receptacle

Plug

No. of Circuits	Receptacle Part Numbers	Plug Part Numbers
	Free-Hanging	Free-Hanging
2	770424-1[1]	770425-1[1]
3	770785-1	770783-1

[1].248 [6.3] centerline.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Mini-Universal MATE-N-LOK 2 Connectors

Pin and Socket Connectors (Continued)

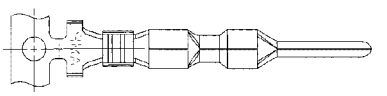
Contacts

Pin Diameter — .039 [0.99]
Stock Thickness — .010 [0.25]

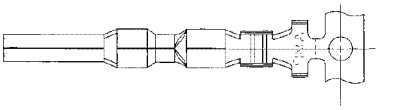
Material

Brass

These contacts can be used in either Mini-Universal MATE-N-LOK 2 Plug or Cap housings only.



Pin



Socket

Not to be used with Mini-Universal MATE-N-LOK Connectors

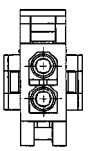
Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	Contact Part Numbers Socket Strip Form
26-22 [.12-.3]	**.047-.069** 1.19-1.75	Pre-tin	794219-1
		Duplex[1]	794219-3
22-18 [.3-.8]	**.059-.110** 1.50-2.39	Duplex[1]	794221-3

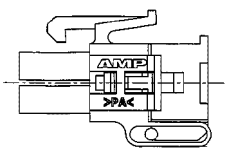
[1]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area and .000100 [.00254] min. tin-lead in crimping area over .000050 [.00127] min. nickel underplate on entire contact.

Housings
Free Hanging

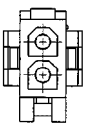
Centerline Spacing — .163 [4.14]

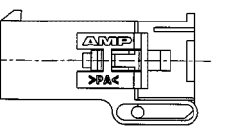
2 Circuit, In-Line





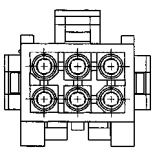
Plug

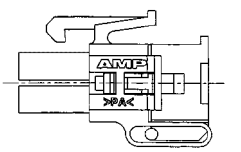




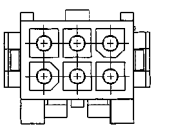
Cap

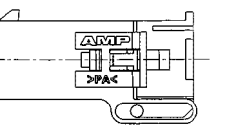
4 and 6 Circuit, Dual Row





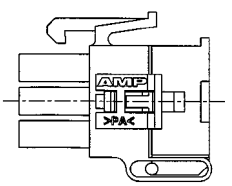
Plug

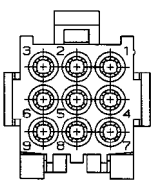




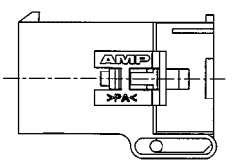
Cap

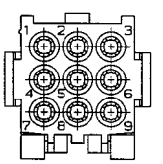
9, 12 and 15 Circuit, Matrix





Plug





Cap

Number of Circuits	Housing Part Numbers UL 94V-0 Nylon, White Color Plug	Cap
2	794184-1	794185-1
4	794188-1	—
6	794190-1	—
9	794194-1	794195-1
12	794200-1	—
15	794204-1	—

Mini-Universal MATE-N-LOK 2 Connectors and Mini-Universal MATE-N-LOK Connectors

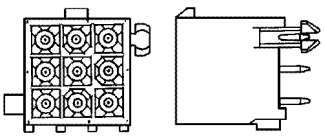
Pin and Socket Connectors (Continued)

Vertical PC Board Pin Headers

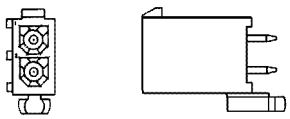
Centerline Spacing — .163 [4.14]
Solder Tail Diameter — .039 [1.00]

Material
Housing — Nylon, white
Flammability Rating — UL 94V-0
Contacts — Brass

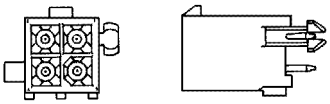
9, 12 and 15 Circuit, Matrix



2 and 3 Circuit, In-Line



4, 6, 8, 10 and 12 Circuit, Double Row



Number of Circuits	Style	Pin Finish	Vertical Pin Header Part Numbers		Mates with Plug Housing Part Number (Using Socket Contacts)	
			With Drain Holes	Without Drain Holes	Mini-UMNL	Mini-UMNL 2
2	In-Line	Tin-Lead[1]	770166-1	770872-1	172165-1	794184-1
3	In-Line	Tin-Lead[1]	770170-1	770873-1	172166-1	794186-1
4	Dual Row	Tin-Lead[1]	770174-1	770874-1	172167-1	794188-1
6	Dual Row	Tin-Lead[1]	770178-1	770875-1	172168-1	794190-1
8	Dual Row	Tin-Lead[1]	794065-1	794073-1	770579-1	794192-1
9	Matrix	Tin-Lead[1]	770182-1	—	172169-1	794194-1
10	Dual Row	Tin-Lead[1]	770743-1	—	770580-1	794196-1
12	Dual Row	Tin-Lead[1]	—	770621-1	770581-1	794198-1
	Matrix	Tin-Lead[1]	770186-1	—	172170-1	794200-1
15	Matrix	Tin-Lead[1]	770190-1	770859-1	172171-1	794204-1

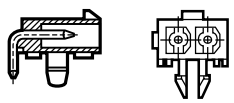
[1]Tin-Lead Finish — Plated with .000150 [.00381] min. tin-lead over .000050 [.00127] min. nickel underplate on entire contact.

Right Angle PC Board Pin Headers With Board Lock Feature

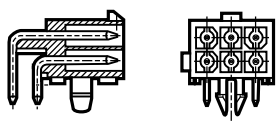
Centerline Spacing — .163 [4.14]
Solder Tail Diameter — .039 [1.00]

Material
Housing — Nylon, white
Flammability Rating — UL 94V-0
Contacts — Brass

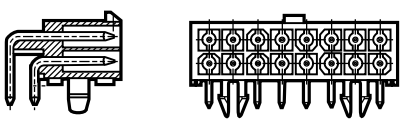
2 and 3 Circuit, In-Line



4, 6, 8 and 12 Circuit, Dual Row



14 and 16 Circuit, Dual Row



Number of Circuits	Style	Pin Finish	Pin Header Part Number with Board Lock	Mates with Plug Housing Part Number (Using Socket Contacts)	
				Mini-UMNL	Mini-UMNL 2
2	In-line	Tin-Lead[1]	770966-1	172165-1	794184-1
3	In-line	Tin-Lead[1]	770967-1	172166-1	794186-1
4	Dual Row	Tin-Lead[1]	770968-1	172167-1	794188-1
		Duplex[2]	770968-2		
6	Dual Row	Tin-Lead[1]	770969-1	172168-1	794190-1
8	Dual Row	Tin-Lead[1]	770970-1	770579-1	794192-1
12	Dual Row	Tin-Lead[1]	770972-1	770581-1	794198-1
		Duplex[2]	770972-2		
14	Dual Row	Tin-Lead[1]	770973-1	770582-1	794202-1
16	Dual Row	Tin-Lead[1]	770974-1	770583-1	794206-1

[1]Tin-Lead Finish — Plated with .000150 [.00381] min. tin-lead over .000050 [.00127] min. nickel underplate on entire contact.
[2]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area and matte tin-lead on solder tail end over .000050 [.00127] min. nickel underplate on entire contact.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Mini-Universal MATE-N-LOK Connectors

Pin and Socket Connectors (Continued)

Contacts (Used in Mini-Universal MATE-N-LOK plug or cap housings below and on page 317)

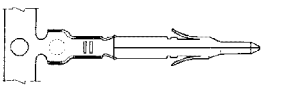
Pin Diameter — .039 [0.99]
Stock Thickness — .008 [0.20]

Material and Finish

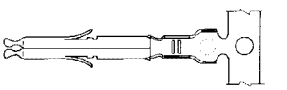
Brass or phosphor bronze with pre-tin plating or duplex plated .000030 [0.00076] min. gold in mating area and .000100 [.00254] min. tin-lead in crimping area over .000050 [0.00127] nickel underplate on entire contact

Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	Contact Part Numbers			
			Pin		Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
30-26 [.05-.12]	**.035-.050** .889-1.27	Pre-tin	—	—	770834-1	794058-1
26-22 [.12-.3]	**.047-.069** 1.19-1.75	Pre-tin	770901-1	770985-1	770902-1	770986-1
		Duplex[1]	770901-3	770985-3	770902-3	770986-3
22-18 [.3-.8] or 22 x (2) [.3]	**.059-.110** 1.50-2.39 or **.133** Max. 3.38	Pre-tin	—	—	770904-1	770988-1
		Duplex[1]	—	770987-3	770904-3	770988-3
20-16 [.5-1.2] or 20 x (2) [.5]	**.079-.126** 2.01-3.20 or **.094 x (2)** 2.39	Pre-tin	171636-1[2]	171638-1[2]	171637-1[2]	171639-1[2]
		Duplex[1]	—	—	171637-3[2]	—

[1]Duplex Finish — Plated with .000030 [.000762] min. gold in mating area and .000100 [.00254] min. tin-lead in crimping area over .000050 [.00127] min. nickel underplate on entire contact.
[2].671 [17.04] and .659 [16.74] dimensions are .689 [17.50] for indicated part numbers.



Pin

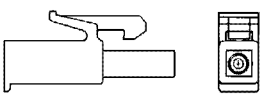


Socket

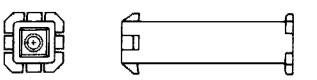
Housings
Free Hanging or Panel Mount

Centerline Spacing — .163 [4.14]

1 Circuit, Free Hanging

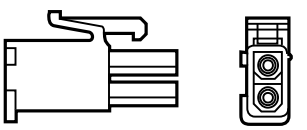


Plug

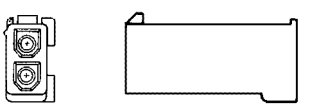


Cap

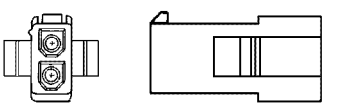
2 and 3 Circuit, In-Line



Plug



Cap (Free Hanging)



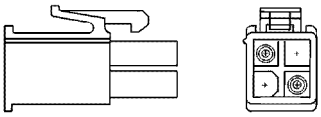
Cap (Panel Mount)

Number of Circuits	Housing Part Numbers					
	UL 94V-0 Nylon, White Color			UL 94V-2 Nylon, Natural Color		
	Plug	Cap		Plug	Cap	
		Panel Mount	Free Hanging		Panel Mount	Free Hanging
1	172164-1	—	—	—	—	—
2	172165-1	172157-1	172233-1	172336-1	172328-1	172343-1
3	172166-1	172158-1	172234-1	172337-1	172329-1	172344-1

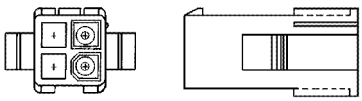
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Pin and Socket Connectors (Continued)

4 and 6 Circuit, Dual Row

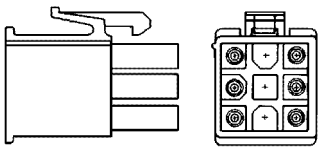


Plug

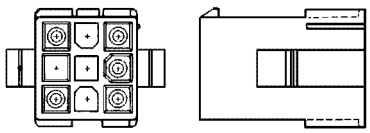


Cap

9, 12 and 15 Circuit, Free Hanging or Panel Mount, Matrix



Plug

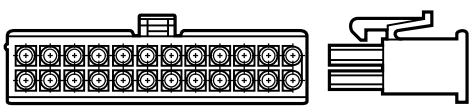


Cap

Number of Circuits	Housing Part Numbers[1]			
	UL 94V-0 Nylon, White Color		UL 94V-2 Nylon, Natural Color	
	Plug	Cap	Plug	Cap
4	172167-1	172159-1	172338-1	172330-1
6	172168-1	172160-1	172339-1	172331-1
9	172169-1	172161-1	172340-1	172332-1
12	172170-1	172162-1	172341-1	172333-1
15	172171-1	172163-1	172342-1	172334-1

[1]Housing part numbers shown in table are all natural color. Other colors, red, green, blue, black, are also available. To order connectors in these colors use the appropriate dash numbers as follows: Red 1-XXXXXX-2, Green 1-XXXXXX-5, Blue 1-XXXXXX-6, Black 1-XXXXXX-9

8 thru 24 Circuit, Free Hanging, Dual Row



Plug

Number of Circuits	UL 94V-0 Nylon, White Color
	Plug Part Number
8	770579-1
10	770580-1
12	770581-1
14	770582-1
16	770583-1
18	770584-1
20	770585-1
22	770586-1
24	770587-1

(MR) Miniature Rectangular Connectors

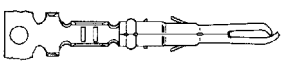
Pin and Socket Connectors (Continued)

Contacts (Used in (MR) Miniature Rectangular plug or cap housings on page 319)

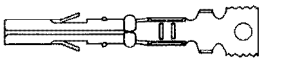
Pin Diameter — .068 [1.73]
Stock Thickness — .008 [0.20]

Material and Finish

Brass or phosphor bronze with pre-tin plating or selectively plated .000030 [0.00076] min. gold in mating area over .000050 [0.00127] nickel underplate on entire contact



Live Split Pin



Standard Socket

Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	Contact Part Numbers			
			Live Split Pin		Standard Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
26-24 [.12-.2]	**.025-.050** .635-1.27	Pre-tin	—	640579-1	—	794001-1
		Select Gold[1]	350968-2	640579-2	794000-2	794001-2
26-18[2] [.12-.8]	**.050-.115** 1.27-2.92	Pre-tin	350967-1	640545-1	641294-1	641300-1
		Select Gold[1]	350967-2	640545-2	641294-2	641300-2

[1]Select Gold Finish — Plated with .000030 min. [.000762] gold in mating area over .000050 [.00127] min. nickel underplate on entire contact.
[2]1650 CMA maximum.

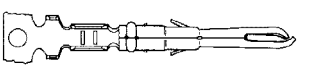
Grounding Pin

(Mate first, break last, not for interrupting current)

Pin Diameter — .068 [1.73]
Stock Thickness — .008 [.203]

Material

Phosphor bronze



Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	Pin Part Number
			Loose Form
26-18[2] [.12-.8]	**.050-.115** 1.27-2.92	Select Gold[1]	640580-2

[1]Select Gold Finish — Plated with .00030 [.000762] min. gold in mating aera over .000050 [.00127] min. nickel underplate on entire contact.
[2]1650 CMA maximum

Solder Tail Socket

Stock Thickness — .008 [.203]

Material & Finish

Phosphor bronze, pre-tin

Part Number 350838-1
Note: Recommended for use with MR Socket Housings

Keying Plug

Part Number 350591-1
UL94V-0 Nylon material
Note: Use in socket housings only.

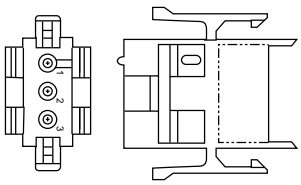
(MR) Miniature Rectangular Connectors

Pin and Socket Connectors (Continued)

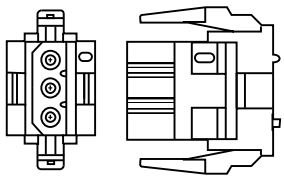
Housings
Free Hanging or Panel Mount

Centerline Spacing — .165 [4.19]
Contacts — Order separately (see page 318)

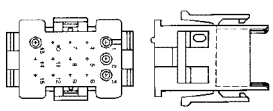
Material
Nylon, UL 94V-0, natural color-brick red



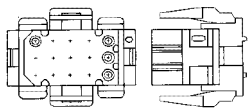
2, 3 Circuit In-Line Cap



2, 3 Circuit In-Line Plug



4, 6, 9, 15, 20, 24 and 36 Circuit Matrix Cap



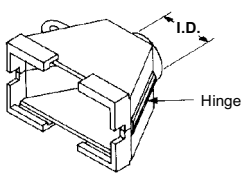
4, 6, 9, 15, 20, 24 and 36 Circuit Matrix Plug

No. of Circuits	Part Numbers	
	Pin Housing (Cap)	Socket Housing (Plug)
2	1-640507-0	1-640517-0
3	1-640508-0	1-640518-0
4	1-640509-0	1-640519-0
6	1-640510-0	1-640520-0
9	1-640511-0	1-640521-0
12	1-640512-0	1-640522-0
15	1-640513-0	1-640523-0
20	1-640514-0	1-640524-0
24	1-640515-0	1-640525-0
36	1-640516-0	1-640526-0

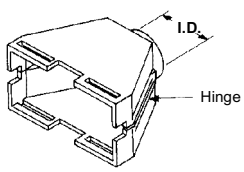
Strain Reliefs
One Piece — Clam Shell
(Illustrated in closed position)

Material
Nylon, natural color-brick red
Flammability Rating — UL 94V-0

6, 9, 12, 15 and 20 Circuit



24 and 36 Circuit

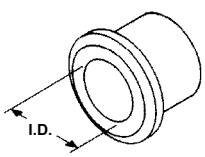


Notes:
1. These strain reliefs can be used with either pin or socket housings.
2. **Customer supplied:** One No. 6 Panhead Type B self-taping screw, 3/8 long. Plating is optional to conform to customer requirements.
3. Strain reliefs are also available in UL94V-2 nylon, black in color. To order strain reliefs in this material use the appropriate dash numbers. 1-XXXXXX-9.

Number of Circuits	I.D.	Part Numbers
6	**.374** 9.50	350373-1
9	**.420** 10.67	350522-1
12	**.420** 10.67	350374-1
15	**.420** 10.67	350523-1
20	**.560** 14.22	480634-1
24	**.560** 14.22	350524-1
36	**.560** 14.22	480594-1

Strain Relief
Adapting Grommet

Material
Flexible PVC (55/75 Durometer) black color



Number of Circuits	I.D.	Part Numbers
6	**.156** 3.96	1-350377-0
	.218 5.54	1-350376-0
	.296 7.52	1-350375-0
9, 12 & 15	**.218** 5.54	1-350378-1
	.250 6.35	1-350379-1
	.281 7.14	1-350380-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

(MR) Miniature Rectangular Connectors

PC Board Vertical Pin Headers

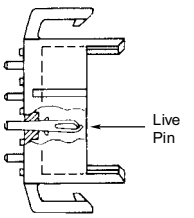
Centerline Spacing — .165 [4.19]
Solder Tail Diameter — .040 [1.02]

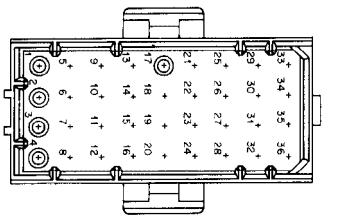
Material

Housing — Nylon, natural color-brick red
Flammability Rating — UL 94V-0
Contacts — Phosphor bronze

Pin and Socket Connectors (Continued)

20, 24 and 36 Circuit, Matrix





Number of Circuits	Board Thickness	Part Numbers		Mates with Socket Housing Part No.
		Tin Finish Contacts	Duplex Finish Contacts[1]	
2	**.062** 1.57	640497-1	640497-2	1-640517-0
	.120 3.05	640497-3	640497-4	
3	**.062** 1.57	640498-1	640498-2	1-640518-0
	.120 3.05	—	640498-4	
4	**.062** 1.57	640499-1	640499-2	1-640519-0
	.120 3.05	640499-3	640499-4	
6	**.062** 1.57	640500-1	640500-2	1-640520-0
	.120 3.05	—	640500-4	
9	**.062** 1.57	640501-1	640501-2	1-640521-0
	.120 3.05	640501-3	640501-4	
12	**.062** 1.57	640502-1	640502-2	1-640522-0
	.120 3.05	640502-3	—	
15	**.062** 1.57	640503-1	640503-2	1-640523-0
	.120 3.05	640503-3	640503-4	
20	**.062** 1.57	640504-1	640504-2	1-640524-0
	.120 3.05	—	640504-4	
24	**.062** 1.57	640505-1	640505-2	1-640525-0
	.120 3.05	—	640505-4	
36	**.062** 1.57	640506-1	640506-2	1-640526-0
	.120 3.05	—	640506-4	

[1]Duplex Finish—Plated with .000030 [.000762] min. gold in mating area, matte tin on solder tail end over .000050 [.00127] min. nickel underplate on entire contact.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

.062 [1.57] Commercial Pin & Socket Connectors

Pin and Socket Connectors (Continued)

Contacts (Used in .062 [1.57] Commercial plug or receptacle housings below)

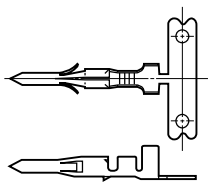
Pin Diameter — .062 [1.57]
Stock Thickness — .008 [0.20]

Material and Finish

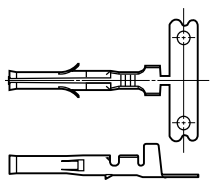
Brass or phosphor bronze with pre-tin plating or selectively plated .000030 [0.00076] min. gold in mating area over .000050 [0.00127] nickel underplate on entire contact

Wire Size AWG [mm²]	Ins. Dia.	Material & Finish	Contact Part Numbers			
			Pin		Socket	
			Strip Form	Loose Form	Strip Form	Loose Form
30–24 0.05–0.2	**.060** 1.52 Max.	Brass/ Pre-tin	—	—	640392-1	794019-1
			—	—	794046-1[2]	—
24–18 0.2–0.9	**.050–.110** 1.27–2.79	Brass/ Pre-tin	350629-1	794017-1	350628-1	—
			770983-1[3]	—	794380-1[3]	—
		Brass/ Sel. Gold[1]	350629-5[1]	—	350628-5[1]	—

[1]Select Gold — .000030 min. in mating area over .000050 nickel.
[2]Lanceless Socket for Overmolding.
[3]Contact Retention 15 lbs. min.
Note: Phosphor bronze contacts should be used in high-temperature/humidity cycling applications.



Pin



Socket

Contact Insertion Tool

Part No. 91002-1

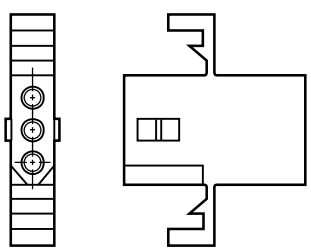
Housings
Free Hanging or Panel Mount

Centerline Spacing — .145 [3.68]
Contacts — Order separately (see above)

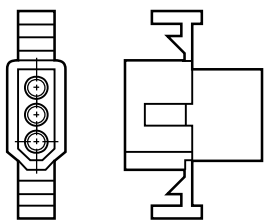
Material

Nylon, UL 94V-0, natural color

2, 3, and 4 Circuit, In-Line

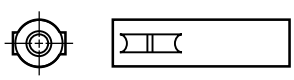


Receptacle

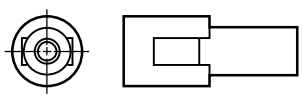


Plug

1 Circuit



Receptacle



Plug

No. of Circuits	Receptacle Part Numbers		Plug Part Numbers	
	Panel Mount	Free Hanging	Panel Mount	Free Hanging
1	—	—	—	770278-1
2	770343-1	770342-1 770419-1[1]	770341-1	770340-1
3	770326-1	770333-1	770332-1	770331-1
4 (In-Line)	770335-1	770274-1	—	770275-1
4 (Matrix)	—	770442-1	770443-1	770433-1
6	770354-1	770356-1	—	770355-1
9	—	770429-1	—	770428-1

[1]Positive Lock

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Pin and Socket Connectors (Continued)

Signal Contacts — Type II, Crimp

Material and Finish

Contact Body — Brass, plated .000030 [0.00076] gold over .000050 [0.00127] nickel
Retention Spring — Stainless steel

Pin

Socket

Contact Size 16 — Pin Diameter .062 [1.57] (Test Current, 13 Amperes)

Wire Size Range AWG [mm²]	Insulation Dia. Range	Tape Mounted Contact No.		Loose Piece Contact No.		Contact Color Code
		Pin	Socket	Pin	Socket	
28-24 [0.08-0.20]	**.035-.055** 0.89-1.40	—	—	201611-1	201613-1	Red/Red
	.048-.065 1.22-1.65	—	—	—	—	Red/Red
24-20 [0.2-0.6]	**.040-0.62** 1.02-1.57	—	—	201578-1	201580-1	Yellow/Red
	.055-.088 1.40-2.16	201330-6	—	201330-1	201328-1	Yellow/Red
18 [0.9-0.9] (Two)	No. Ins. Support	—	—	202725-1	—	Blue
18-16 [0.8-1.4]	**.080-.105** 2.03-2.67	—	—	202507-1	202508-1	—
	No Ins. Support	—	200333-8	200336-1	200333-1	Blue/Blue
		—	—	204219-1	—	Blue/Blue
14 [2]	No Ins. Support	—	—	201570-1	201568-1	Violet/Blue
		—	—	212618-1	—	—

Signal Contacts — Type III+ Crimp Snap-In

Material and Finish

Contact Body — Brass (see chart at right for plating)
Retention Spring — Stainless steel

Pin

Socket

Wire Size Range AWG [mm²]	Ins. Dia. Range	Contact Finish	Part Numbers			
			Strip Form		Loose Form	
			Pin	Socket	Pin	Socket
30-26 [0.05-0.15]	**.040-.060** 1.02-1.52	Bright Tin-Lead	66425-6	—	—	—
		Gold/Nickel[1]	66425-7	—	66429-3	66428-3
		Sel. Gold/Nickel[2]	66425-8	66424-8	66429-4	66428-4
	.014-.030 0.36-0.76	Gold/Nickel[1]	66393-7	—	—	—
		Sel. Gold/Nickel[2]	66393-8	66394-8	66406-4	66405-4
26-24 [0.12-0.2]	**.035-.055** 0.89-1.40	Bright Tin-Lead	66106-6	66108-6	66107-2	66109-2
		Gold/Nickel[1]	66106-7	66108-7	66107-3	66109-3
		Sel. Gold/Nickel[2]	66106-8	66108-8	66107-4	66109-4
24-20 [0.2-0.6]	**.040-.080** 1.02-2.03	Bright Tin-Lead	66102-7	66104-7	66103-2	66105-2
		Gold/Nickel[1]	66102-8	66104-8	66103-3	66105-3
		Sel. Gold/Nickel[2]	66102-9	66104-9	66103-4	66105-4
	.060-.120 1.52-3.05	Bright Tin-Lead	66564-6	66563-6	66566-2	66565-2
		Sel. Gold/Nickel[2]	66564-8	66563-8	66566-4	66565-4
	.080-.100 2.03-2.54	Bright Tin-Lead	66332-5	66331-5	66400-1	66399-1
		Gold/Nickel[1]	66332-7	66331-7	66400-3	66399-3
		Sel. Gold/Nickel[2]	66332-8	66331-8	66400-4	66399-4
18-16 [0.8-2.0]	**.080-.100** 2.03-2.54	Bright Tin-Lead	66098-7	66100-7	66099-2	66101-2
		Gold/Nickel[1]	66098-8	66100-8	66099-3	66101-3
		Sel. Gold/Nickel[2]	66098-9	66100-9	66099-4	66101-4
18-14 [0.8-2.0]	**.080-.100** 2.03-2.54	Bright Tin-Lead	66359-6	66358-6	66361-2	66360-2
		Gold/Nickel[1]	66359-9	66358-9	66361-3	66360-3
		Sel. Gold/Nickel[2]	1-66359-0	1-66358-0	66361-4	66360-4
	.110-.150 2.79-3.81	Bright Tin-Lead	66597-1	66598-1	66602-1	66601-1
		Sel. Gold/Nickel[2]	66597-2	66598-2	66602-2	66601-2

Finish:
[1].000015 [0.00038] gold in mating area over .000050 [0.00127] nickel
[2].000030 [0.00076] gold in mating area over .000050 [0.00127] nickel

Pin and Socket Connectors (Continued)

Posted Contacts
(Replacement contacts for all posted connectors)

Material and Finish
Contact Body — Brass (see chart below for plating)
Retention Spring — Stainless steel

Pin

Socket

Contact Size 16 — Pin Diameter .062 [1.57] (Test Current, 13 Amperes)

Termination Method	Post Configuration	Contact Finish	Loose Piece Contact No.					
			3 Termination High Post		2 Termination High Post		1 Termination High Post	
			Pin	Socket	Pin	Socket	Pin	Socket
Wrap-Type	**.025 x .025** 0.64 x 0.64	Sel. Gold/Nickel[1]	66460-9	66461-9	66460-8	66461-8	66460-7	66461-7
		Gold/Nickel[2]	66460-6	66461-6	66460-5	66461-5	66460-4	66461-4
		Bright Tin-Lead	66460-3	66461-3	66460-2	66461-2	66460-1	66461-1
	.045 x .045 1.14 x 1.14	Sel. Gold/Nickel[1]	66471-9	66473-9	—	—	66471-7	66473-7
		Bright Tin-Lead	66471-3	66473-3	—	—	66471-1	66473-1
	.031 x .062 0.79 x 1.57	Sel. Gold/Nickel[1]	66470-9	66472-9	—	—	66470-7	—
		Bright Tin-Lead	66470-3	—	—	—	—	—
TERMI-POINT Clip	**.031 x .062** 0.79 x 1.57	Sel. Gold/Nickel[1]	66468-9	66459-9	—	—	—	—

Finish:
[1]Gold flash over .000050 [0.00127] nickel on entire contact, with .000030 [0.00076 gold to a distance of .200 [5.08] from mating end. Gold thickness controlled on socket O.D.
[2].000030 [0.00076] gold over .000050 [0.00127] nickel on contact body. Gold thickness controlled on socket O.D.
Posts plated tin-lead over copper.

Signal Contacts — Type III+ Solder Version

Material and Finish
Contact Body and Tab — Brass (see chart at right for plating)
Retention Spring — Stainless steel

Pin – Crimp Style

Socket – Crimp Style

Pin – Solder Tab Style

Contact Size 16 — Pin Diameter .062 [1.57] (Test Current, 13 Amperes)

Contact Style	Wire Size Range AWG [mm²]	Contact Finish	Part Numbers — Loose Form	
			Pin	Socket
Crimp	26-20 0.12-0.6	Gold/Nickel[1]	66182-1	66183-1
	18-16 0.8-1.4	Gold/Nickel[1]	66180-1	66181-1
Solder Tab	—	Duplex[2]	202236-1	202237-1
		Bright Tin-Lead[3]	202236-2	202237-2

Socket – Solder Tab Style

Finish:
[1].000030 [0.00076] gold in mating area over .000050 [0.00127] nickel.
[2]Duplex plated .000030 [0.00076] gold in mating area over .000050 [0.00127] nickel on contact body; bright tin-lead on solder tab.
[3]Bright tin-lead on entire contact.

Multimate Contacts can be used with M Series, CPC and Metrimate Connectors

Type III+ Contacts

Material
Contact Body — Brass
Retention Spring — Stainless steel

Contact Finish Code	Wire Size AWG [mm²]	Part Numbers — Strip Form
		Pin
Tin	18-14 0.8-2	213603-1

Pin and Socket Connectors (Continued)

Type XII High Current Contacts

Material

Pin Body — Leaded Brass
Socket Body — Copper Alloy
Louvertac Band — Beryllium Copper
Retention Spring — Stainless Steel

Finish

Body — Silver
Louvertac Band — Gold

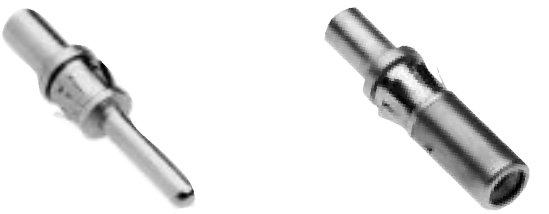
Type I, Crimp

Material

Contact Body — Bronze
Retention Spring — Beryllium Copper

Finish

Contact Body — .000030 [0.00076] gold over .000050 [0.00127] nickel. Gold thickness controlled on socket O.D.
Retention Spring — Nickel plated



Pin Socket

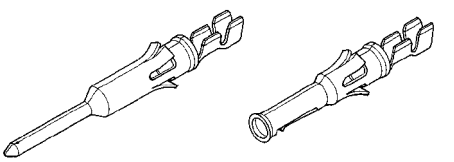
Size 12 — Pin Diameter .094 [2.39] (Test Current, 23 Amperes)

Wire Size Range AWG [mm²]	Loose Form	
	Pin	Socket
18-16 0.8-1.4	—	202418-1
14-12 2-3	202422-1	202417-1

"G" Series Modular Connectors Type VI Contacts

Material

Copper Alloy
Contact Size — 16
Pin Diameter — .062 [1.57]
Test Current — 13 amperes



Pin Socket

Wire Size Range AWG [mm²]	Ins. Dia. Range	Contact Finish	Contact Part Nos. (reeled for AMP) Quick-Change Applicator		Loose Piece Contact Part Nos.	
			Pin	Socket	Pin	Socket
28-26 0.08-0.15	**.035-.055** 0.89-1.4	Gold/Nickel[3]	—	66586-4	—	—
24-20 0.2-0.6	**.040-.080** 1.02-2.03	Tin	66583-2	66584-2	66593-1	66594-1
		Gold/Nickel[3]	66583-4	66584-4	66593-2	66594-2
22-18 0.3-0.9	**.055-.110** 1.40-2.79	Tin	66581-2	66582-2	66591-1	66592-1
		Gold/Nickel[3]	66581-4	66582-4	66591-2	66592-2
18-16 0.8-1.4	**.080-.100** 2.03-2.54	Tin	66579-2	66580-2	66589-1	66590-1
		Gold/Nickel[3]	66579-4	66580-4	66589-2	66590-2
14 2	**.080-.135**[2] 2.03-3.43	Tin	66577-2	—	—	—

[1]Wire strip length — .156 [3.96] (all wire sizes).
[2]Maximum insulation diameter recommended for "G" Series connectors with Multimate contact cavities is .110 [2.79].
[3]Gold flash over .000050 [0.00127] nickel on entire contact with .000030 [0.00076] selective gold plating on contact area.

For Complete Product Information, Order Catalogs 65141 and 82046

Pin and Socket Connectors (Continued)

Circular Plastic Connectors (CPC) — Series 1 for Cable and Panel Mount

Material

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Order separately (see pages 322 & 323)

Standard Sex Connectors

Shell Size/ No. of Cavities	Part Numbers			
	Receptacles Square Flange With Inserts	Receptacles Square Flange Without Inserts	Receptacles Free-Hanging	Plug Assemblies
11/4	—	206061-1	206153-1	—
13/9	208131-1	206705-1	206705-2	206708-1
17/16	—	206036-1	206036-3	—
23/24	—	206838-1	206838-2	206837-1
23/37	787610-1	206151-1	206151-2	206150-1

Reverse Sex Connectors

Shell Size/ No. of Cavities	Part Numbers			
	Receptacles Square Flange With Inserts	Receptacles Square Flange Without Inserts	Receptacles Free-Hanging	Plug Assemblies
11/4	211102-1	206430-1	206430-2	206429-1
17/14	211103-1	206043-1	206043-3	206044-1
23/37	—	206306-1	206306-2	206305-1

Circular Plastic Connectors (CPC) — Series 1 VDE Tested for Cable and Panel Mount

Material

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Order separately (see pages 322 & 323)

Standard Sex Connectors

Shell Size/ No. of Cavities	Part Numbers	
	Receptacles Square Flange Without Inserts	Plug Assemblies
13/7	211401-1	211399-1
17/9	211767-1	211766-1
23/19	211771-1	211770-2

Reverse Sex Connectors

Shell Size/ No. of Cavities	Part Numbers	
	Receptacles Square Flange Without Inserts	Plug Assemblies
13/7	211398-1	211400-1
17/9	211769-1	211768-1
23/19	211773-1	211772-1

Circular Plastic Connectors (CPC) — Series 1 Receptacle for PC Board Mount

(With .025 [0.64] Square Solder Tails)

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Duplex plated gold flash on entire contact with .000030 [0.00076] min. gold on contact engagement area, tin-lead on termination area

Standard Sex (Posted Pin Contacts)

Shell Size	Receptacle Assemblies	
	Mounting Holes	Threaded Inserts
11-4	—	207825-1
13-9	208223-1	—
17-16	207303-3	—

Note: Posts are .017 [0.43] offset from centerline of contacts. All posts must be oriented in the same plane for proper contact/post location.

Reverse Sex (Posted Socket Contacts)

Shell Size	Receptacle Assemblies	
	Mounting Holes	Threaded Inserts
11-4	208283-1	—
23-37	208224-1	—
23-37	207890-1	—

Note: Posts are .017 [0.43] offset from centerline of contacts. All posts must be oriented in the same plane for proper contact/post location.

Shell Size 13/9Pos. w/Mtg. Holes
Part No. 208223-1
(37 pos. shown in photo)

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Special Circular Plastic Connectors (CPC) — Series 1 Receptacle with Square Flange and Round Posted Contacts (Size 16)

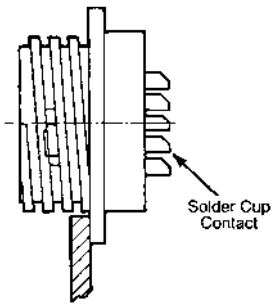
Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Brass, plated tin over .000050 [0.00127] min. nickel on entire contact

Shell Size 17/16 Pos.
Part No. 207292-1

Special CPC Connectors, Square Flange Receptacle, With Solder Type Contacts (Size 16), Contact Arrangement 17-16

Material and Finish:
Housing — Thermoplastic, 94V-0 rated, heat-stabilized, fire-resistant, self-extinguishing, black
Contacts — Brass
Plating —
Plated .000030 [0.00076] min. gold over .000030 [0.00076] min. nickel on entire contact.



Connector Part No. 206404-1

Special Circular Plastic Connectors (CPC) — Series 1 Receptacle for Feed-Through
(Pressure Rating up to 30 psi)

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Copper alloy, plated gold over nickel

Shell Size	Standard Numbering Plug	Reverse Numbering Plug	Feed-Thru Receptacle
11/4	206060-1	—	—
17/16	206037-1	206554-1	206552-1

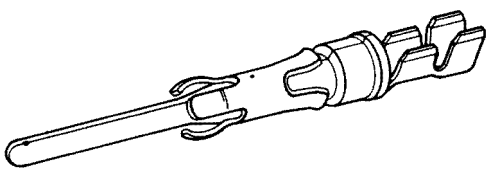
Signal Contacts
Type III+ (Precision Formed, Crimp)

Contact Size — 16
Pin Diameter — 1.57 [.062]

Material and Finish

Contact Body — Copper alloy, plated tin or gold
Spring — Stainless steel

Grounding Pin
(make first - break last)



Wire Size Range [mm²]	Wire Size Range AWG	Ins. Dia. Range[1]	Contact Finish	Strip-Form Pin Contact No.	Loose Piece Pin Contact No.
0.8-1.4	18-16	**1.98-2.49** .078-.098	Tin-Lead	164161-3	164164-1
			Sel. Gold/Nickel[4]	164161-4	164164-2

[1]Overall insulation crimp diameter, including crimp barrel, must not exceed 3.18 [.125].
[4]Gold flash over 0.00127 [.000050] nickel on entire contact, with 0.00076 [.000030] gold in contact area.

Special Circular Plastic Connectors (CPC) — Series 2 Receptacles for Feed-Through
(Pressure Rating up to 30 psi)

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Copper alloy, plated gold over nickel

Shell Size	Standard Numbering Plug	Feed-Thru Receptacle
11/8	205838-1	—
17/28	—	206127-1

Note: One plug must have standard numbering cavities, and the other plug must have reverse numbering cavities.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Circular Plastic Connectors (CPC) — Series 2 for Cable and Panel Mount

Material

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Order separately (see Catalog 82021)

Standard Sex Connectors

Shell Size/ No. of Cavities	Part Numbers: Receptacles Square Flange Without Inserts	Receptacles Free-Hanging	Plug Assemblies
11/8	205841-1	205841-2	—
11/9	206486-1	206486-2	206485-1
17/28	205840-3	206152-1	205839-3
23/63	205843-1	205843-2	205842-1

Note: Receptacles accept Size 20 DM or DF Pin Contacts. Plugs accept Size 20 DM or DF Socket Contacts. Max. wire insulation diameter is .220 [5.59].

Reverse Sex Connectors

Shell Size/ No. of Cavities	Part Numbers: Receptacles Square Flange Without Inserts	Receptacles Square Flange With Threaded Inserts	Receptacles Free-Hanging	Plug Assemblies
11/8	206433-1	206433-3	—	206434-1
17/28	206038-1	—	206038-2	206039-1
23/57	206438-1	—	206438-2	206437-1

Note: Receptacles accept Size 20 DM or DF Socket Contacts. Plugs accept Size 20 DM or DF Pin Contacts. Max. wire insulation diameter is .220 [5.59].

Receptacles, Printed Circuit Board Mount

with .025 [0.64] sq. solder tails

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Contacts —
A — Duplex plated gold flash on entire contact with .000030 [0.00076] min. gold on contact engagement area, tin-lead on the termination area, all over .000050 [0.00127] min. nickel underplating
B — Plated gold flash on the entire contact, tin-lead on the termination area

Standard Sex (Posted Pin Contacts)

Shell Size	Receptacle Assemblies: Mounting Holes
11/9	206852-2
17/28	207369-1
23/63	206455-2

Note: Posts are .017 [0.43] offset from centerline of contacts. All posts must be oriented in the same plane for proper contact/post location.

Reverse Sex (Posted Socket Contacts)

Shell Size	Receptacle Assemblies: Mounting Holes
11/8	208657-1
17/28	207216-2

Note: Posts are .017 [0.43] offset from centerline of contacts. All posts must be oriented in the same plane for proper contact/post location.

Circular Plastic Connectors (CPC) — Series 3

Material

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Order separately (see Catalog 82021)

Standard Sex Connectors

Shell Size/ No. of Cavities	Part Numbers: Receptacles Square Flange Without Inserts	Receptacles Free-Hanging	Plug Assemblies
17/3	206036-2	206207-1	206037-2
23/7	206137-1	206137-2	206136-1

Note: Receptacles accept XII Pin Contacts. Plugs accept Type XII Socket Contacts. Max. wire insulation diameter is .220 [5.59].

Reverse Sex Connectors

Shell Size/ No. of Cavities	Part Numbers: Receptacles Square Flange Without Inserts	Receptacles Free-Hanging	Plug Assemblies
17/3	206425-1	206425-2	206426-1
23/7	206227-1	—	206226-1

Note: Receptacles accept XII Socket Contacts. Plugs accept Type XII Pin Contacts. Max. wire insulation diameter is .220 [5.59].

Circular Plastic Connectors (CPC) — Series 4

Material

Housing — Thermoplastic, 94V-0 rated, black
Contacts — Order separately (see pages 322 & 323). Also see Catalog 82021

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Shell Size	No. of Cavities: Power	No. of Cavities: Multimate	Receptacles: Square Flange	Receptacles: Free-Hanging	Plug
23-13M	5	8	211825-1	—	211824-1
23-16M	4	12	207486-1	207486-2	207485-1
23-22M	2	20	206613-1	206613-3	206612-1

Note: Maximum wire insulation diameter is .150 [3.81] for Multimate contacts; 220 [5.59] for Power contacts.

Pin and Socket Connectors (Continued)

Circular Plastic Connectors (CPC) — Cable Clamps

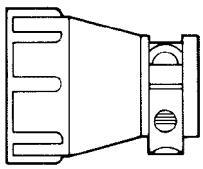
Material

Housing — Thermoplastic, heat stabilized, fire-resistant, self-extinguishing, 94V-1 rated, black

Standard Size Cable Clamps

Shell Size	Cable O.D. Max.	Thread Size	Part Numbers	
			Individually Packaged	Bulk Packaged
11	**.329** 8.36	5/8-24 UNEF-2B	206062-3	206062-4[1]
13	**.453** 11.51	3/4-20 UNEF-B	206966-1	206966-2[2]
17	**.453** 11.51	15/16-20 UNEF-B	206070-1	206070-3[2]
23	**.703** 17.86	1-3/8-18 UNEF-B	206138-1	206138-2[3]

Minimum quantity that can be ordered in multiples:
[1] 400, [2] 200, [3] 100

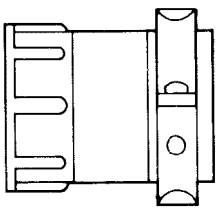


Standard Size

Large Size Cable Clamps

Shell Size	Cable O.D. Max.	Thread Size	Part Numbers	
			Individually Packaged	Bulk Packaged
11	**.453** 11.51	5/8-24 UNEF-2B	206358-1	206358-2[1]
13	**.703** 17.86	3/4-20 UNEF-B	—	207008-2[2]
17	**.703** 17.86	15/16-20 UNEF-B	206322-1	206322-2[2]
23	**1.125** 28.58	1-3/8-18 UNEF-B	206512-1	206512-2[3]

Minimum quantity that can be ordered in multiples:
[1] 200, [2] 100, [3] 75

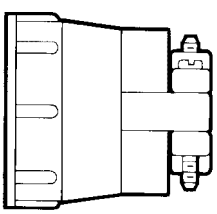


Large Size

Circular Plastic Connectors (CPC) — Cable Clamps, Self-Centering (Shell Size 23)

Material

Housing — Thermoplastic, black

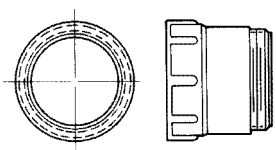


Part No. 207774-1 Individual Pack
Part No. 207774-2 Bulk Pack

Circular Plastic Connectors (CPC) — Back-Shell Extender (Shell Size 23)

Material

Housing — Glass-filled thermoplastic, black

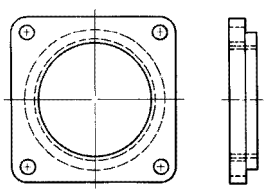


Part No. 207055-1

Circular Plastic Connectors (CPC) — Panel Mount Flanges (Plugs Only)

Material

Housing — Thermoplastic, black

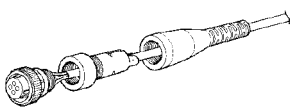


Part No. 207299-1 Shell Size 11
Part No. 207299-2 Shell Size 13
Part No. 207299-3 Shell Size 17
Part No. 207299-4 Shell Size 23

Circular Plastic Connectors (CPC) — Flexible Cable Boot and Internal Cable Grip (Shell Size 11)

Material

Housing — Thermoplastic, black
Cable Range — .150-.250 [3.81-6.35]



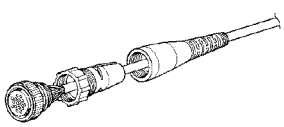
Part No. 207489-1 Cable Boot
Part No. 207490-1 Cable Grip

Circular Plastic Connectors (CPC) — Flexible Cable Boot and Internal Cable Grip (Shell Size 17)

Material

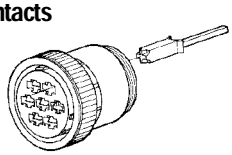
Housing — Thermoplastic, black

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.



Part No. 207241-1 Cable Boot
Part No. 207387-1 Cable Grip
(for Cable Range of .200-.250 [5.08-6.35])
Part No. 207387-2 Cable Grip
(for Cable Range of .250-.350 [6.35-8.89])

Circular Plastic Connectors (CPC) — Keying Plugs, Series 3 and 4 for Type XII Contacts



Part No. 206508-1 Socket Cavities
Part No. 207597-1 Pin Cavities

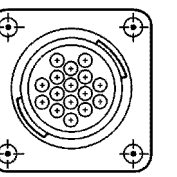
Circular Plastic Connectors (CPC) — Sealed, Special Series I Receptacle with Pre-Installed, Bonded Peripheral Seal

Material

Housing — Thermoplastic, 94V-0 rated, black
Seal — Elastomer, gray

Shell Size	Series I Receptacles with Peripheral Seal			
	No. of Positions	Sex	Square Flange Part No.	Free-Hanging Part No.
13	9	Std.	206705-3	—
17	16	Std.	206036-4	206036-5
	14	Rev.	206043-4	—

Notes: 1. For detailed performance data on peripheral seals, refer to AMP Product Specification No. 108-10024.
2. Receptacle mates with Series 1 plugs.

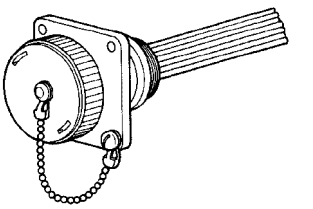


Circular Plastic Connectors (CPC) — Sealing Caps for Receptacles

Material and Finish

Cap — Thermoplastic, heat stabilized, fire-resistant, self-extinguishing, 94V-1 rated, black
Sealing Gasket — Neoprene, black
Bead Chain — Steel, plated nickel
Bead Chain Coupling — Brass, plated nickel

Shell Size	Series	Part Numbers	
		With Plastic Strap	With Metal Bead Chain
11	1 & 2	206903-1	208800-1
13	1	211870-1	213485-1
17	1, 2 & 3	207445-1	208652-1
23	1, 3 & 4	207446-1	208680-1
		207446-2	208680-2

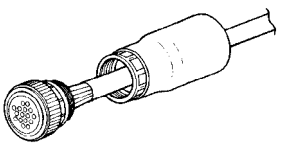


Circular Plastic Connectors (CPC) — Cable Entry Seals, Heat Shrinkable

Material

Internal Sleeve — Nylon
Outer Tubing — Polyolefin

Shell Size	Sealing Range Diameter	Part Number
11	**.260-.600** 6.60-15.25	54010-1
13	**.300-.725** 7.62-18.42	54123-1
17	**.400-.875** 10.16-22.22	54011-1
23	**.550-1.250** 13.97-31.75	54012-1

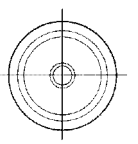


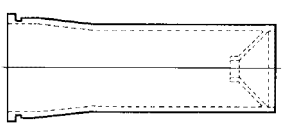
Jacketed Cable Seals (for Shell Size 23)

A jacketed cable seal kit provides an environmentally sealed connection for jacketed cable.

Material

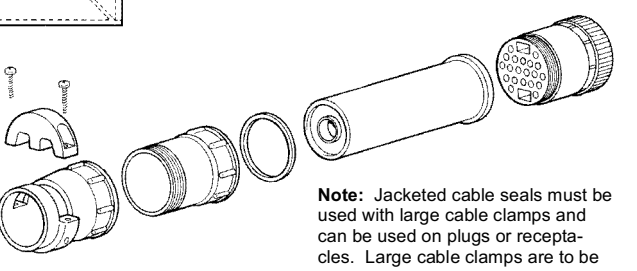
Peripheral Seal — Grey elastomer
Collar — Aluminum
Jacketed Cable Seal — Black rubber
Back-Shell Extender — Black glass-filled thermoplastic
Special Clamp Saddle — Black thermoplastic





Female

Sealing Range Dia.	Kit Number
.450-.600 11.43-15.24	207052-2
.600-.875 15.24-22.22	207052-3



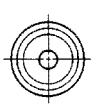
Note: Jacketed cable seals must be used with large cable clamps and can be used on plugs or receptacles. Large cable clamps are to be ordered separately.

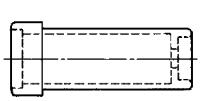
Circular Plastic Connectors (CPC) — Rubber Boot

Material

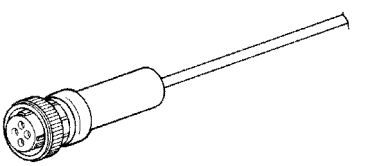
Neoprene, black
Cable Range — .219-.438 [5.56-11.13]

Note: For use with jacketed cable and can be used on all plugs and receptacles except Series 2 connectors.





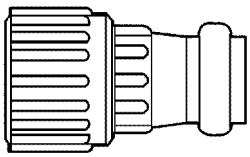
Shell Size 11
Part No. 206304-1



BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Plug Kit, Unassembled

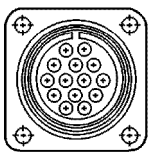
Part Number 213571-2
without Cable Clamp

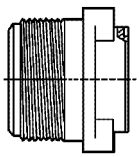


Receptacle, Square Flange

Reverse Sex

Part Number 213570-1





Circular Plastic Connectors (CPC) — Metal Shell Series 1, Standard Sex

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Metal Shell — Zinc alloy, plated nickel
Grooved Pin — Steel alloy, plated nickel
Tetraseal — Fluorocarbon
Retainer Ring — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see pages 322 & 323)

Shell Size/ No. of Cavities	Part Numbers		
	Receptacles Square Flange	Plugs without Tetraseals	Plugs with Tetraseals
14/15	208719-1	208718-1	208718-2
14/7	208715-1	208714-1	—
22/16	208489-1	208488-1	208488-3
28/24	208459-1	208457-1	—
28/37	208471-1	208470-1	—

Note: Maximum wire insulation diameter is .100 [2.54], except arrangements 14/5 and 28/24 are .150 [3.81] max.

Circular Plastic Connectors (CPC) — Metal Shell Series 1, Reverse Sex

Material and Finish

Housing — Thermoplastic, 94V-0 rated, black
Metal Shell — Zinc alloy, plated nickel
Grooved Pin — Steel alloy, plated nickel
Tetraseal — Fluorocarbon
Retainer Ring — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see pages 322 & 323)

Shell Size/ No. of Cavities	Part Numbers		
	Receptacles Square Flange	Plugs without Tetraseals	Plugs with Tetraseals
14/15	208721-1	208720-1	—
14/7	208717-1	208716-1	—
22/14	208487-1	208486-1	208486-3
28/37	208473-1	208472-1	—

Note: Maximum wire insulation diameter is .100 [2.54], except arrangements 14/5 and 28/24 are .150 [3.81] max.

Metal-Shell CPC Connectors, Series 2, Standard Sex

Material and Finish

Square Flange Receptacle — Housing and Retention Insert — Thermoplastic, UL 94V-0 rated, black
Metal Shell — Zinc alloy, plated nickel
Grooved Pin — Steel alloy, plated nickel
Tetraseal — Fluorocarbon
Retainer Ring — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see Catalog 82021)

Shell Size	Part Numbers	
	Square Flange Receptacle	Plug without Tetraseal
22-28	208491-1	208490-1
28-63	208477-1	208476-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Metal-Shell CPC Connectors, Series 2, Reverse Sex

Material and Finish

Square Flange Receptacle — Housing and Retention Insert — Thermoplastic, UL 94V-0 rated, black
Metal-Shell — Zinc alloy, plated nickel
Grooved Pin — Steel alloy, plated nickel
Retainer Ring — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see Catalog 82021)

Shell Size	Square Flange Receptacle	Plug without Tetraseal
28-57	208475-1	208474-1

Metal-Shell CPC Connectors, Series 3, Standard Sex

Material and Finish

Square Flange Receptacle — Housing — Thermoplastic, UL 94V-0 rated, black
Metal-Shell — Zinc alloy, plated nickel
Peripheral Seal — Elastomer, grey
Grooved Pin — Stainless steel
Tetraseal — Fluorocarbon
Retainer Rings — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see Catalog 82021)

Shell Size	Square Flange Receptacle	Plug without Tetraseal
22-3	—	208494-1
28-7	208483-1	208482-1

Metal-Shell CPC Connectors, Series 3, Reverse Sex

Material and Finish

Square Flange Receptacle — Housing — Thermoplastic, UL 94V-0 rated, black
Metal-Shell — Zinc alloy, plated nickel
Peripheral Seal — Elastomer, grey
Grooved Pin — Stainless steel
Tetraseal — Fluorocarbon
Retainer Rings — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see Catalog 82021)

Shell Size	Square Flange Receptacle	Plug without Tetraseal
22-3	—	208496-1
28-7	208485-1	208484-1

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Metal-Shell CPC Connectors, Series 4, Standard Sex

Material and Finish

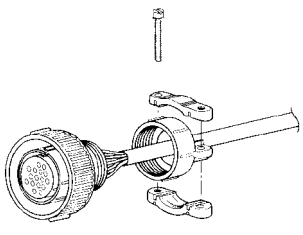
Square Flange Receptacle — Housing — Thermoplastic, UL 94V-0 rated, black
Metal-Shell — Zinc alloy, plated nickel
Grooved Pin — Stainless steel
Tetraseal — Fluorocarbon
Retainer Rings — Stainless steel
Coupling Ring — Zinc alloy, plated nickel
Contacts — Order separately (see pages 322, 323 & Catalog 82021)

Arrangement	Square Flange Receptacle	Plug without Tetraseal
28-16M	208479-1	208478-1
28-22M	208481-1	—

Circular Plastic Connectors (CPC) — Metal Shell Cable Clamps

Material and Finish

Zinc alloy, nickel plated



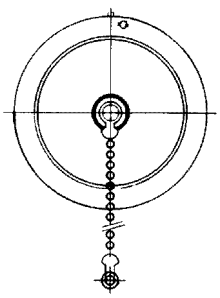
Shell Size	Cable O.D. Range	Thread Size	Part Number
14	**.225-.562** 5.71-14.27	7/8-20 UNEF-3B	208945-5
22	**.325-.750** 8.26-19.05	1-3/16-18 UNEF-3B	208945-7
28	**.450-.938** 11.43-23.83	1-7/16-18 UNEF-3B	208945-8

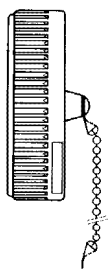
Protective Cap Assemblies (for Metal-Shell CPC Receptacles Only)

Material and Finish

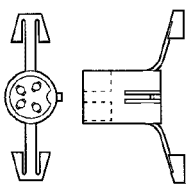
Zinc alloy, nickel plated

Shell Size	Part No.
14	213823-2
22	211903-1
28	211904-1





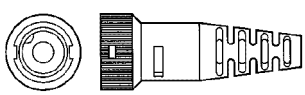
Audio/Instrument Connectors (DIN Type)



Plug Assemblies

Material

Contact Housings and Cord Guard — Thermoplastic, black

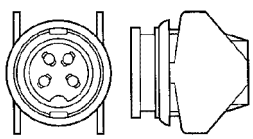


No. of Pos.	Contact Housing Part No.	Cord Guard Part No.
4	207313-1	207314-1
6	207332-1	—

Receptacles

Material

Housing — Thermoplastic, black



No. of Pos.	Receptacle Housing Part No.
4	207316-1

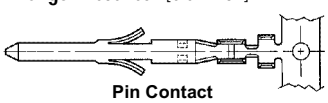
Contacts

Material and Finish

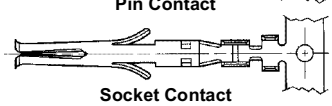
Brass, plated:
A—Tin over nickel
B—Gold flash over nickel
Pin Diameter—.058 [1.47]
Wire Range—28-22 AWG [0.08-0.04 mm²]

Insulation Diameter

Range—.036-.054 [0.91-1.37]



Pin Contact



Socket Contact

Contact Finish	Pin Strip	Socket Strip
Tin	207438-2	207437-2

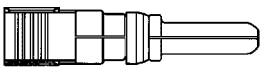
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

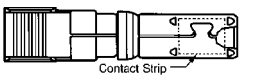
Pin and Socket Connectors (Continued)

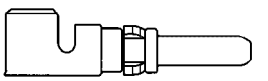
.125 POWERBAND Contacts (used with CPC and Metrimate Connectors)

Material and Finish

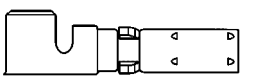
Contacts — Copper
Plating — .000030 [0.00076] min. gold on contact area, gold flash on remainder, all over .000050 [0.00127] min. nickel underplate.







.125 POWERBAND Pin Contact
Part No. 213845-2



.125 POWERBAND Socket Contact
Part No. 213847-4

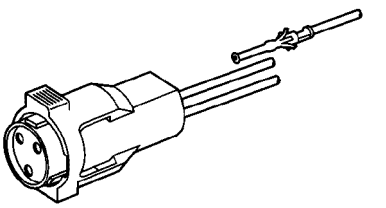
Econoseal Sealed

Free-Hanging Plugs

Material

Thermoplastic, black

No. of Positions	Plug Part No.
1	207901-1
2	207845-1
3	207567-1
4	207571-1
7	207575-1
9	208530-1

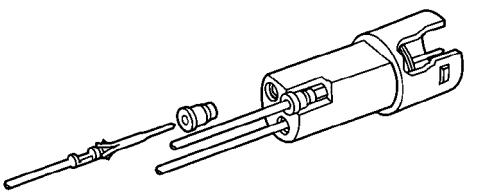


Free-Hanging Receptacles

Material

Thermoplastic, black

No. of Positions	Receptacle Part No.
1	207902-1
2	207846-1
3	207563-1
4	207569-1
7	207573-1

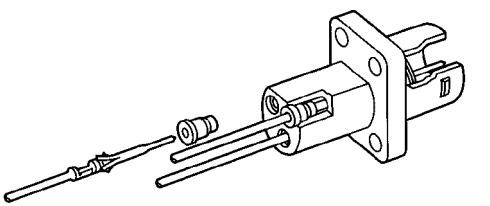


Flanged Panel-Mount Receptacles

Material

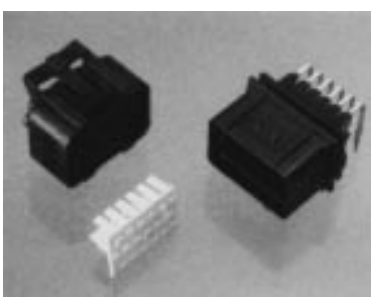
Thermoplastic, black

No. of Positions	Receptacle Part No.	Flanged Receptacle Mate with Plug Part No.
3	207807-1	—
8	208677-1	208678-1
9	208546-1	—



Econoseal III

070 Series, Wire To Board, Connector Housings, Headers and Lock Plates



Positions	Plug Connectors Receptacle Contact 175104-2 Required		Printed Circuit Board Header
	Housing Black Nylon	Lock Plate White Nylon	Housing, Black Nylon, Glass Filled
18	344106-1	344107-1	344103-1
36	344111-1	344112-1	344108-1

Header contacts are brass with selective gold plating at the separable interface and tin lead plating at the PCB interface.

Table of Contents Click Below

Section Seven: Switches and Shunts

Switches and Shunts (Continued)

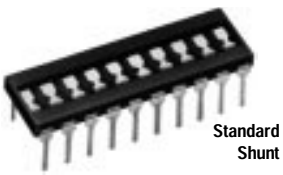
7600 Series – Dual-In-Line Package (DIP) Shunts

Contact Lead Spacing — .100 x .300 [2.54 x 7.62]
Lead Length — .140 [3.56] below mounting surface

Material and Finish

Housing — Glass-filled thermoplastic, 94V-0 rated
Metal Parts — Copper alloy with electroplated tin finish

No. of Positions	Standard Shunt Standard Pressure	Machine Insertable Shunt
4	435704-4	—
6	435704-6	—
7	435704-7	—
8	435704-8	436860-7
10	1-435704-0	436860-9
12	1-435704-2	1-436860-1



Standard Shunt

Machine Insertable Shunt

2-Position, Low-Profile Post Shunts

Material and Finish

Housings — Glass-filled thermoplastic, 94V-0 rated
Contacts — Phosphor bronze, plated .000050 [0.00127] min. nickel, gold plate in contact area or tin plate overall

Configuration	Part Numbers		
	.000015 [0.00038] Gold Plate	.000030 [0.00076] Gold Plate	.000100 [0.00254] Tin Plate
Strip of 10	531220-2	531220-3	531220-1
Loose Piece	—	531220-5	—

Strip of 10, 2-Position Low-Profile Shunts

Heavy Duty Housing Shunt .100 [2.54] Centerlines Part No. 850102-1

Material and Finish

Housings — Glass-filled thermoplastic, 94V-0 rated, black
Contacts — Phosphor bronze or beryllium copper, plated .000050 [0.00127] min. nickel, .000030 [0.00076] min. gold plate in contact area

(Strip of 10)

Standard Posted Housing Shunt .200 [5.08] Centerlines

Material and Finish

Part No. 531230-3 — .000030 [0.00076] min. gold plating, black housing
Part No. 531230-2 — .000015 [0.00038] min. gold plating, black housing
Part No. 531230-1 — .000100 [0.00254] min. tin plate, black housing
Housings — Glass-filled thermoplastic, 94V-0 rated
Contacts — Phosphor bronze or beryllium copper, plated .000050 [0.00127] min. nickel

(Strip of 10)

Tandem Spring Shunts .100 [2.54] Centerlines

Material and Finish

Housings — Nylon, 94V-0 rated, black
Contacts — Phosphor bronze

Housing Color	Part Numbers		
	Gold Inlay[1] .000015 [0.00038]	Gold Inlay[1] .000030 [0.00076]	Tin Plate .000100 [0.00254]
Natural	—	530153-1	—
Black	3-530153-2	530153-2	2-530153-2
Blue	—	530153-6	—

[1]In contact area.

2mm Mini-Shunt .079 [2.00] Centerline

Material and Finish

Part No. 382575-2 — .000015 [0.00038] min. gold plating, black housing
Part No. 382575-3 — .000030 [0.00076] min. gold plating, black housing

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Shunts

Switches and Shunts (Continued)

2-Position, Low Profile Economy Shunt .100 [2.54] Centerlines

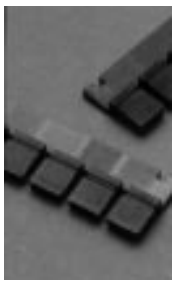
(Strip of 10)

Material and Finish

Part No. 382811-2 — .000015 [0.00038] min. gold plating, blue housing
Part No. 382811-6 — .000015 [0.00038] min. gold plating, black housing
Part No. 382811-8 — .000005 [0.00013] min. gold plating, black housing

Housings — Glass-filled thermoplastic, 94V-0 rated
Contacts — Phosphor bronze or beryllium copper, plated .000050 [0.00127] min. nickel

2-Position, Low Profile Closed Top Shunts .100 [2.54] Centerlines



Part No. 382823-5 Loose Piece

Material and Finish

Housings — Glass-filled thermoplastic, 94V-0 rated, black
Contacts — Beryllium copper with .000015 [0.00038] gold plate on contact area

2-Position, Low-Profile Handle Shunts with Open Top .100 [2.54] Centerlines

Material and Finish

Housings — Glass-filled thermoplastic, 94V-0 rated
Contacts — Phosphor bronze or beryllium copper, plated .000050 [0.00127] min. nickel

Housing Color	Part Numbers		
	Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]	Tin Plate .000100 [0.00254]
Black	881545-1	881545-2	881545-4
Black	880584-1	880584-2	—

[1]In contact area.

Dual In-Line Package Switches (DIP)

Single Pole, Single Throw, Side Actuated, Low Profile

Contact Lead Spacing — .100 x .300 [2.54 x 7.62]
Lead Length — .140 [3.56] below mounting surface

Material and Finish

Housing — Glass-filled polyester, 94V-0 rated, black
Rocker — Thermoplastic, 94V-0 rated, white
Spring Contacts and Leads — Copper alloy with .000030 [0.00076] gold in contact area and .000150 [0.00381] tin-lead on solder tails and .000050 [0.00127] nickel underplate all over

No. of Switches	SPST Side Actuated Part No.		
	Unsealed[1]	Sealed	UV Sealed
2	1-435802-0	—	1-435802-3
3	435802-2	—	1-435802-4
4	435802-3	1-435802-5	1-382394-5
5	435802-4	1-435802-6	—
6	435802-5	1-435802-7	1-382394-7
7	435802-6	1-435802-8	—
8	435802-1	435802-9	382394-9
9	435802-7	—	—
10	435802-8	2-435802-0	2-382694-0
12	—	2-435802-2	—

[1]All switches are bottom sealed.

Sealed Version Shown

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Dual In-Line Package Switches (DIP)

Switches and Shunts (Continued)

Single Pole, Single Throw

Contact Lead Spacing — .100 x .300 [2.54 x 7.62]
Lead Length — .140 [3.56] below mounting surface

Material and Finish

Housing — Glass-filled polyester, 94V-0 rated, blue
Rocker — Thermoplastic, 94V-0 rated, white
Spring Contacts and Leads — Copper alloy with .000030 [0.00076] gold in contact area and .000150 [0.00381] tin-lead on solder tails and .000050 [0.00127] nickel underplate all over

No. of Switches	Standard Profile		Low Profile
	Unsealed[1] Part No.	UV Sealed Part No.	Unsealed[1] Part No.
3	3-435640-0	—	—
4	435640-2	3-382396-5	435668-3
5	435640-3	—	435668-4
6	435640-4	—	435668-5
7	435640-1	—	—
8	435640-5	—	435668-7
9	435640-6	—	—
10	435640-7	—	—

[1]All switches are bottom sealed.

Standard Profile

Low Profile

Double Pole, Double Throw

Contact Lead Spacing — .100 x .300 [2.54 x 7.62]
Lead Length — .140 [3.56] below mounting surface

No. of Switches	DPDT Part No.	
	Low Profile Actuator	Extended Lever Actuator
1	435470-5	3-435470-1

Preprogrammed — Screwdriver Slot Actuator with Removable Tape Seal

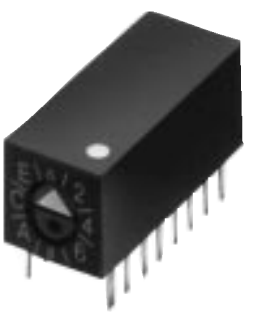
Contact Lead Spacing — .100 x .300 [2.54 x 7.62]
Lead Length — .140 [3.56] below mounting surface

Material and Finish

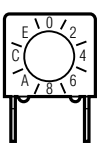
Housing — Glass-filled polyester, 94V-0 rated, black
Contacts — Copper alloy with gold over nickel plating

Switch Type	Actuator	Stamping Legend[1]	Switch Part No.
Hexadecimal w/Complement (16 Position)	Screwdriver Slot	I	53137-5
Hexadecimal w/Complement (16 Position)	Screwdriver Slot	I	54792-1
Hexadecimal w/Complement (16 Position)	Screwdriver Slot	II	54792-2
BCD w/Complement (10 Position)	Screwdriver Slot	III	53919-2
BCD w/Complement (10 Position)	Screwdriver Slot	III	54778-1
Input/Output (2 Position)	Screwdriver Slot	IV[2]	53921-3

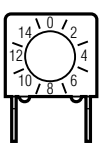
[1]All switches marked with epoxy ink unless otherwise noted.



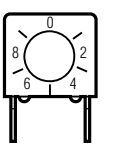
Stamping Legend



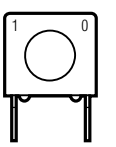
Style I



Style II



Style III



Style IV

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Table of Contents

Click Below

Section Eight: Terminals and Splices

Standard Terminals and Splices

PIDG Ring Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
						Loose Piece	Tape Mounted
26-24 238-475 [0.12-0.24]	**.029** 0.74	6 M3.5	**.250** 6.35	Yellow	**.105** 2.67	—	54311-1
26-22 202-810 [0.10-0.41]	**.020** 0.51	2 M2	**.140** 3.56	Yellow	**.082** 2.08	—	2-323912-1
		4	**.203** 5.16	Yellow	**.082** 2.08	—	2-323914-1
		6	**.203** 5.16	Yellow	**.082** 2.08	—	2-323915-2
		M3.5	**.250** 6.35	Yellow	**.082** 02.08	—	2-326875-1
		8 M4	**.250** 6.35	Yellow	**.082** 2.08	—	2-323916-1
24-20 320-1,290 [0.16-0.65]	**.025** 0.64	8 M4	**.312** 7.92	Natural	**.100** 2.54	—	1-323989-0
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	4	**.182** 4.62	Red	**.140** 3.56	—	2-320882-1
			.218 5.54	Red	**.125** 3.18	—	2-320553-2
			.218 5.54	Red	**.140** 3.56	—	2-31880-1
			.250 6.35	Red	**.125** 3.18	—	2-323758-1
		6 M3.5	**.218** 5.54	Red	**.125** 3.18	—	2-36149-2
			.218 5.54	Red	**.140** 3.56	—	2-36150-1
			.250 6.35	Red	**.125** 3.18	51863[1]	51863-1
			.281 7.14	Red	**.125** 3.18	—	2-36151-2
			.281 7.14	Red	**.125** 3.18	—	2-36152-1
			.312 7.92	Red	**.125** 3.18	—	2-323008-1
			.281 7.14	Red	**.140** 3.56	—	2-326878-1
		8 M4	**.281** 7.14	Red	**.125** 3.18	—	2-320554-1
			.281 7.14	Red	**.140** 3.56	—	2-31886-2
			.312 7.92	Red	**.125** 3.18	—	1-320551-1
			.312 7.92	Red	**.140** 3.56	—	2-31890-1

[1]Available in small packaging quantities.

Standard Terminals and Splices

PIDG Ring Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
						Loose Piece	Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	10	**.281** 7.14	Red	**.125** 3.18	—	2-320552-1
			.281 7.14	Red	**.140** 3.56	—	2-31887-1
			.312 7.92	Red	**.125** 3.18	—	2-36153-2
			.312 7.92	Red	**.140** 3.56	—	2-36154-2
			.344 8.74	Red	**.140** 3.56	32837[1]	32837-1
		1/4 M6	**.469** 11.91	Red	**.125** 3.18	—	2-320571-2
			.469 11.91	Red	**.140** 3.56	—	2-31894-2
		5/16 M8	**.469** 11.91	Red	**.140** 3.56	—	2-31895-1
		3/8	**.531** 13.49	Red	**.140** 3.56	—	2-31897-2
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	4	**.250** 6.35	Blue	**.150** 3.81	—	2-324159-2
			.250 6.35	Blue	**.170** 4.32	—	2-328996-1
		6 M3.5	**.250** 6.35	Blue	**.170** 4.32	—	2-320619-1
			.312 7.92	Blue	**.170** 4.32	—	2-326882-1
			.312 7.92	Blue	**.150** 3.81	—	51864-3
			.343 8.71	Blue	**.150** 3.81	—	2-36157-2
			.343 8.71	Blue	**.170** 4.32	—	2-36158-1
		8 M4	**.312** 7.92	Blue	**.170** 4.32	53941-1[1]	53941-2
			.312 7.92	Blue	**.150** 3.81	51864-1[1]	51864-5
			.343 8.71	Blue	**.150** 3.81	—	2-320560-1
			.343 8.71	Blue	**.170** 4.32	—	2-320565-1
		10	**.312** 7.92	Blue	**.170** 4.32	53942-1	53942-2
			.312 7.92	Blue	**.150** 3.81	51864-2[1]	51864-4
			.343 8.71	Blue	**.150** 3.81	—	2-320574-2
			.343 8.71	Blue	**.170** 4.32	—	2-36160-1
		1/4 M6	**.469** 11.91	Blue	**.150** 3.81	—	2-320563-2
			.469 11.91	Blue	**.170** 4.32	—	2-321045-1

[1]Available in small packaging quantities.

Standard Terminals and Splices

PIDG Ring Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
						Loose Piece	Tape Mounted
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	5/16 M8	**.469** 11.91	Blue	**.150** 3.81	—	2-320575-1
			.469 11.91	Blue	**.170** 4.32	—	2-328998-1
		3/8	**.531** 13.49	Blue	**.150** 3.81	—	2-320564-3
			.531 13.49	Blue	**.170** 4.32	—	2-328999-1
16-14D[1] 2,050-5,180 [1.04-2.62]	.050 1.27	6 M3.5	**.281** 7.14	Yellow/Blk.	**.230** 5.84	—	2-320631-1
		8 M4	**.343** 8.71	Yellow/Blk.	**.230** 5.84	—	1-320627-0
			.343 8.71	Yellow/Blk.	**.250** 6.35	—	2-35106-1
		10	**.343** 8.71	Yellow/Blk.	**.230** 5.84	—	2-320630-2
			.343 8.71	Yellow/Blk.	**.250** 6.35	—	2-34805-1
		1/4 M6	**.500** 12.70	Yellow/Blk.	**.250** 6.35	—	2-323682-1
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.281** 7.14	Yellow	**.230** 5.84	—	2-320634-1
			.281 7.14	Yellow	**.250** 6.35	—	2-35149-1
			.375 9.53	Yellow	**.230** 5.84	—	2-320567-2
			.375 9.53	Yellow	**.250** 6.35	—	2-35107-1
		8 M4	**.312** 7.92	Yellow	**.230** 5.84	—	1-35787-0
			.375 9.53	Yellow	**.230** 5.84	—	2-320568-1
			.375 9.53	Yellow	**.250** 6.35	—	2-35108-1
		10	**.312** 7.92	Yellow	**.230** 5.84	—	1-324918-0
			.343 8.71	Yellow	**.230** 5.84	—	1-32883-0
			.375 9.53	Yellow	**.230** 5.84	—	2-36161-2
		1/4 M6	**.500** 12.70	Yellow	**.230** 5.84	—	2-35273-2
			.531 13.49	Yellow	**.230** 5.84	—	2-320569-3
			.531 13.49	Yellow	**.250** 6.35	—	2-35110-1
		5/16 M8	**.531** 13.49	Yellow	**.230** 5.84	—	2-320576-1
			.531 13.49	Yellow	**.250** 6.35	—	2-35111-1
		3/8	**.593** 15.06	Yellow	**.230** 5.84	—	2-320577-3

[1]Heavy duty for extra mechanical strength.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Standard Terminals and Splices

Terminals and Splices (Continued)

PIDG Ring Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
16-14 2,050-5,180 [1.04-2.62]	.033 0.84	10	**.312** 7.92	Blue	**.150** 3.81	51861-4
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	8 M4	**.375** 9.53	Yellow	**.300** 7.62	2-35605-2
		10	**.375** 9.53	Yellow	**.300** 7.62	2-35364-1
		1/4 M6	**.500** 12.70	Yellow	**.300** 7.62	2-323763-2
			.531 13.49	Yellow	**.300** 7.62	2-35345-1
		5/16 M8	**.531** 13.49	Yellow	**.300** 7.62	2-35346-1
		3/8	**.593** 15.06	Yellow	**.300** 7.62	1-35478-0

PIDG Ring Tongue Terminals (Insulation Restricting)

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727 or Nickel plated per QQ-N-290

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color Solid/Stripe	Wire Insulation Diameter Range	Part Numbers Loose Piece
24 475 [0.24]	**.029** 0.74	4	**.203** 5.16	Yellow/Blue	**.031-.055** 0.79-1.40	2-323914-2
		6 M3.5	**.250** 6.35	Yellow/Blue	**.031-.055** 0.79-1.40	2-326875-4
22 754 [0.38]	**.033** 0.84	6 M3.5	**.218** 5.54	Red/Green	**.038-.110** 0.97-2.79	2-36149-3[1]
			.250 6.35	Red/Green	**.038-.110** 0.97-2.79	51863-2[1]
		8 M4	**.312** 7.92	Red/Green	**.038-.110** 0.97-2.79	1-320551-2[1]
20 1.186 [0.60]	**.033** 0.84	4	**.218** 5.54	Red/Red	**.046-.110** 1.17-2.79	52273-1[1]
		6 M3.5	**.218** 5.54	Red/Red	**.046-.110** 1.17-2.79	2-36149-4[1]
			.250 6.35	Red/Red	**.046-.110** 1.17-2.79	51863-3
		8 M4	**.312** 7.92	Red/Red	**.046-.110** 1.17-2.79	1-320551-3[1]
		10	**.312** 7.92	Red/Red	**.046-.110** 1.17-2.79	2-36153-4[1]
		1/4 M6	**.469** 11.91	Red/Red	**.046-.110** 1.17-2.79	2-320571-4[1]
		5/16 M8	**.469** 11.91	Red/Red	**.046-.110** 1.17-2.79	2-320572-3[1]
18 1,900 [0.96]	**.033** 0.84	6 M3.5	**.218** 5.54	Red/White	**.056-.110** 1.42-2.79	2-36149-5[1]
			.250 6.35	Red/White	**.056-.110** 1.42-2.79	51863-4[1]
		8 M4	**.312** 7.92	Red/White	**.056-.110** 1.42-2.79	1-320551-4[1]
		10	**.312** 7.92	Red/White	**.056-.110** 1.42-2.79	2-36153-5[1]
		1/4 M6	**.469** 11.91	Red/White	**.056-.110** 1.42-2.79	2-320571-5[1]

[1]Available in small packaging quantities.

Standard Terminals and Splices

PIDG Ring Tongue Terminals (Insulation Restricting)

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727 or Nickel plated per QQ-N-290

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color Solid/Stripe	Wire Insulation Diameter Range	Part Numbers Loose Piece
16 2,800 [1.42]	**.033** 0.84	6 M3.5	**.250** 6.35	Blue/Blue	**.063-.130** 1.60-3.30	2-320561-3[1]
			.312 7.92	Blue/Blue	**.063-.130** 1.60-3.30	51864-6[1]
		8 M4	**.312** 7.92	Blue/Blue	**.063-.130** 1.60-3.30	1-51864-0[1]
		10	**.312** 7.92	Blue/Blue	**.063-.130** 1.60-3.30	51864-7[1]
		1/4 M6	**.469** 11.91	Blue/Blue	**.063-.130** 1.60-3.30	2-320563-3[1]
14 4,234 [2.15]	**.033** 0.84	6 M3.5	**.312** 7.92	Blue/Green	**.078-.130** 1.98-3.30	51864-8[1]
		8 M4	**.312** 7.92	Blue/Green	**.078-.130** 1.98-3.30	1-51864-1[1]
		10	**.312** 7.92	Blue/Green	**.078-.130** 1.98-3.30	51864-9[1]
		1/4 M6	**.469** 11.91	Blue/Green	**.078-.130** 1.98-3.30	2-320563-4
12 6,654 [3.37]	**.042** 1.07	6 M3.5	**.375** 9.53	Yellow/Yellow	**.095-.200** 2.41-5.08	2-36161-5
		8 M4	**.375** 9.53	Yellow/Yellow	**.095-.200** 2.41-5.08	2-320568-2[1]
		10	**.375** 9.53	Yellow/Yellow	**.095-.200** 2.41-5.08	2-36161-3[1]
		1/4 M6	**.531** 13.49	Yellow/Yellow	**.095-.200** 2.41-5.08	2-320569-5
10 12,066 [6.11]	**.042** 1.07	8 M4	**.375** 9.53	Yellow/Brown	**.119-.200** 3.02-5.08	2-320568-3[1]
		10	**.375** 9.53	Yellow/Brown	**.119-.200** 3.02-5.08	2-36161-4
		1/4 M6	**.531** 13.49	Yellow/Brown	**.119-.200** 3.02-5.08	2-320569-6
		5/16 M8	**.531** 13.49	Yellow/Brown	**.119-.200** 3.02-5.08	2-320576-3

[1]Available in small packaging quantities.

Standard Terminals and Splices

Terminals and Splices (Continued)

PIDG Ring Tongue Terminals (Radiation Resistant)

Material and Finish:

Terminal Body — Copper per QQ-C-576 with tin plating per MIL-T-10727 or gold plating per MIL-G-45204 over nickel per QQ-N-290

Insulation Support Sleeve — Copper per QQ-C-576 with tin plating per MIL-T-10727

Insulation Sleeve — PVF2, natural color

Wire Range AWG	Wire Range CMA	Tongue Material Thickness Max.	Wire Ins. Dia. Max.	Stripe Color Code	Stud Size	Dim. W	Part Numbers Tin Plate / Loose
22-16	509-3,250	**.033** 0.84	**.125** 3.18	Red	6 M3.5	**.218** 5.54	53406-1
						.250 6.35	53407-1
					8 M4	**.312** 7.91	53408-1
					10	**.312** 7.92	53409-1
16-14	2,050-5,180	**.033** 0.84	**.150** 3.81	Blue	6 M3.5	**.250** 6.35	53415-1
						.312 7.92	53416-1
					8 M4	**.312** 7.92	53417-1
					10	**.312** 7.92	53418-1
					1/4 M6	**.469** 11.91	53419-1
12-10	5,180-13,100	**.042** 1.07	**.230** 5.84	Yellow	8 M4	**.375** 9.53	53424-1[1]
					10	**.375** 9.53	53425-1[1]
					1/4 M6	**.531** 13.48	53426-1[1]

[1]Brazed Body

PIDG Rectangular Tongue Terminals

Material and Finish:

Insulation — Nylon except where noted.

Terminal Body and Metallic Sleeve — Copper per ASTM B-152 except where noted.

Plating — Tin per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Loose Piece
22-16 509-3,260 [0.26-1.65]	.033 0.84	5 M3	**.277** 7.04	Red	**.140** 3.56	2-327950-1
		6 M3.5	**.237** 6.02	Red	**.140** 3.56	2-327956-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.237** 6.02	Blue	**.150** 3.81	2-327958-4
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.237** 6.02	Yellow	**.230** 5.84	2-327960-1

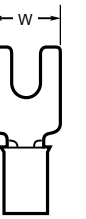
Standard Terminals and Splices

PIDG Spade Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)



Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
26-22 202-810 [0.10-0.41]	**.029** 0.74	4	**.203** 5.16	Yellow	**.082** 2.08	2-321035-1
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	4	**.218** 5.54	Red	**.140** 3.56	1-327717-2
		6 M3.5	**.250** 6.35	Red	**.140** 3.56	2-34541-1
			.297 7.54	Red	**.125** 3.18	2-34080-1
			.297 7.54	Red	**.140** 3.56	2-326861-1
		8 M4	**.375** 9.53	Red	**.125** 3.18	2-32050-1
			.375 9.53	Red	**.140** 3.56	2-32053-1
		10	**.375** 9.53	Red	**.125** 3.18	2-32051-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.244** 6.20	Blue	**.170** 4.32	1-328281-1
			.297 7.54	Blue	**.170** 4.32	2-35559-1
		8 M4	**.297** 7.54	Blue	**.170** 4.32	2-321233-1
		10	**.385** 9.78	Blue	**.170** 4.32	2-32060-1
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.312** 7.92	Yellow	**.230** 5.84	2-326859-1
		8 M4	**.406** 10.31	Yellow	**.230** 5.84	2-32588-1
			.406 10.31	Yellow	**.250** 6.35	2-35152-1
		10	**.406** 10.31	Yellow	**.230** 5.84	2-32589-1

Standard Terminals and Splices

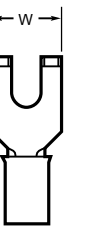
PIDG Flanged Spade Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	2 M2	**.182** 4.62	Red	**.140** 3.56	2-324608-1
		6 M3.5	**.250** 6.35	Red	**.125** 3.18	2-322777-1
			.296 7.52	Red	**.125** 3.18	2-32561-1
			.296 7.52	Red	**.140** 3.56	2-32562-1
		8 M4	**.296** 7.52	Red	**.140** 3.56	2-32562-3
			.416 10.57	Red	**.125** 3.18	2-32497-1
			.416 10.57	Red	**.140** 3.56	2-32498-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.294** 7.47	Blue	**.170** 4.32	2-320861-1
		8 M4	**.294** 7.47	Blue	**.170** 4.32	2-320862-1
		10	**.294** 7.47	Blue	**.170** 4.32	2-320863-2
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	8 M4	**.416** 10.57	Yellow	**.230** 5.84	2-32510-1
		10	**.416** 10.57	Yellow	**.250** 6.35	2-324015-1



Standard Terminals and Splices

PIDG Short Spring Spade Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body—Phosphor bronze per ASTM B-139, tin plated per MIL-T-10727
Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
26-22 202-810 [0.10-0.41]	**.020** 0.51	4	**.203** 5.16	Yellow	**.082** 2.08	52922-1
		6 M3.5	**.250** 6.35	Yellow	**.082** 2.08	52924-1
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	4	**.203** 5.16	Red	**.125** 3.18	52927-1
		5 M3	**.250** 6.35	Red	**.125** 3.18	52928-1
		6 M3.5	**.250** 6.35	Red	**.125** 3.18	52929-1
			.250 6.35	Red	**.140** 3.56	52929-3
		8 M4	**.244** 6.20	Red	**.140** 3.56	55768-1
			.375 9.53	Red	**.125** 3.18	52930-1
			.375 9.53	Red	**.140** 3.56	52930-3
		10	**.406** 10.31	Red	**.125** 3.18	52931-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	5 M3	**.250** 6.35	Blue	**.170** 4.32	52934-1
		6 M3.5	**.250** 6.35	Blue	**.170** 4.32	52935-1
			.250 6.35	Blue	**.182** 4.62	52935-3
		8 M4	**.375** 9.53	Blue	**.170** 4.32	52936-1
			.375 9.53	Blue	**.182** 4.62	52936-3
		10	**.406** 10.31	Blue	**.170** 4.32	52937-1
			.406 10.31	Blue	**.182** 4.62	52937-3
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.250** 6.35	Yellow	**.250** 6.35	52941-1
		8 M4	**.375** 9.53	Yellow	**.250** 6.35	52942-1
		10	**.406** 10.31	Yellow	**.250** 6.35	52943-1

Standard Terminals and Splices

Terminals and Splices (Continued)

PIDG Long Spring Spade Tongue Terminals

Material and Finish:

Insulation—Nylon
Terminal Body—Phosphor bronze per ASTM B-139, tin plated per MIL-T-10727
Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
						Loose Piece	Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6 M3.5	**.250** 6.35	Red	**.125** 3.18	—	52409-1
		8 M4	**.281** 7.14	Red	**.125** 3.18		52410-1
		10	**.343** 8.71	Red	**.125** 3.18	—	52411-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.250** 6.35	Blue	**.170** 4.32	52420-1[1]	52420-3
		8 M4	**.281** 7.14	Blue	**.170** 4.32	52421-1[1]	52421-3
		10	**.343** 8.71	Blue	**.170** 4.32	52422-1[1]	52422-3
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.312** 7.92	Yellow	**.250** 6.35	52430-1	52430-3
		8 M4	**.375** 9.53	Yellow	**.250** 6.35	52431-1	—
		10	**.375** 9.53	Yellow	**.250** 6.35	52432-1	52432-3
		1/4 M6	**.437** 11.10	Yellow	**.250** 6.35	52433-1	—

[1]Available in small packaging quantities.

PIDG Slotted Ring Tongue Terminals

Material and Finish:

Insulation — Nylon
Terminal Body and Metallic Sleeve — Copper per ASTM B-152
Plating — Tin per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers
						Tape Mounted
26-22 202-810 [0.10-0.41]	**.020** 0.51	6 M3.5	**.250** 6.35	Yellow	**.082** 2.08	2-323011-2

PIDG Hook Tongue Terminals

Material and Finish:

Insulation — Nylon
Terminal Body and Metallic Sleeve — Copper per ASTM B-152
Plating — Tin per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers
						Tape Mounted
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	8 M4	**.343** 8.71	Blue	**.170** 4.32	2-320306-1

For Complete Product Information , Order Catalog 82042.

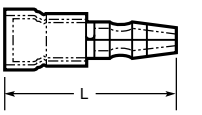
Terminals and Splices (Continued)

PIDG Shur-Plug Terminals

Material and Finish:

Insulation — Nylon
Terminal Body and Metallic Sleeve — Copper per ASTM B-152
Plating — Tin per MIL-T-10727

Wire Size Circular Mils [mm²]	Dimension L Max.	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
16-14 2,050-5,180 [1.04-2.62]	**.790** 20.07	Blue	**.170** 4.32	2-324225-1

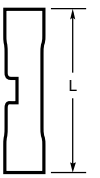


.156 Series

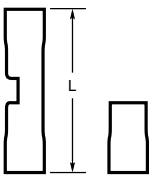
PIDG Butt Splices

Material and Finish:

Insulation Sleeve—Nylon
Splice Body and Insulation Support Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727



Standard and Radiation Resistant



Step Down Assembly[1]

Wire Size Circular Mils[2] [mm²]	Style	Dimension L Max.	Splice Insulation Color	Wire Insulation Diameter Max.	Part Numbers Loose Piece	Part Numbers Tape Mounted
22-16[4] 509-3,260 [0.26-1.65]	Standard	**1.265** 32.13	Red	**.125** 3.18	—	2-320559-4
16-14 2,050-5,180 [1.04-2.62]		**1.265** 32.13	Blue	**.150** 3.81	—	2-320562-3
16-14 2,050-5,180 [1.04-2.62] to 22-18 509-1,900 [0.26-0.96]		**1.265** 32.13	Blue	**.150/.115** 3.81/2.92	—	2-327583-1
22-16[4] 509-3,260 [0.26-1.65]	Step Down Assembly	**1.265** 32.13	Natural w/ Red Stripes	**.125** 3.18	53548-1[3]	—
16-14 2,050-5,180 [1.04-2.62]		**1.265** 32.13	Natural w/ Blue Stripes	**.150** 3.81	53549-1[3]	—
12-10 5,180-13,100 [2.62-6.64]		**1.656** 42.06	Natural w/ Yellow Stripes	**.220** 5.59	53550-1[3]	—

[1]Includes adapter insert.
[2]When using two or more wires in either end of a butt splice, the combined cross sectional area must be within the (CMA) circular mil area range listed.
[3]Available in small packaging quantities.
[4]22-16 splices are 22-18 range in accordance with MIL-T-7928.

PIDG Knife Disconnect Splices

Material and Finish:

Insulation—Nylon
Splice Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Splice Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
22-16 509-3,260 [0.26-1.65]	Red	**.140** 3.56	2-32446-1

Standard Terminals and Splices

PIDG FASTON Receptacles

Material and Finish:

Insulation—Nylon
Receptacle Body—Brass per ASTM B-36, tin plated per MIL-T-10727
Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

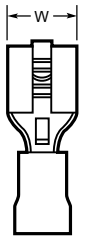
Receptacle Style:

A—No dimple, with wire stop
B—Dimple, with wire stop

Terminals and Splices (Continued)

.250 Series

Wire Size Circular Mils [mm²]	Receptacle Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Fits Tab Thickness	Part Numbers		
						Loose Piece	Tape Mounted	Strip Form
22-18 509-1,900 [0.26-0.96]	B	**.300** 7.62	Red	**.140** 3.56	**.032** 0.81	640903-1[2]	640903-2	640902-1
16-14 2,050-5,180 [1.04-2.62]	B	**.300** 7.62	Blue	**.170** 4.32	**.032** 0.81	640905-1[2]	640905-2	640904-1
14-12 3,831-6,470[3] [1.94-3.28]	B	**.300** 7.62	Green	**.250** 6.35	**.032** 0.81	42844-1[1,2,4]	42844-3[1,4]	—
		.300 7.62	Green	**.250** 6.35	**.032** 0.81	42844-2[1,3,5]	—	—
12-10 5,180-13,100 [2.62-6.64]	B	**.300** 7.62	Yellow	**.250** 6.35	**.032** 0.81	640907-1	640907-2	640906-1
						61198-2[5]		

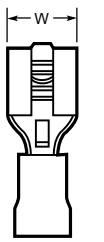


.250 Series

[1]Not UL listed or CSA certified.
[2]Available in small packaging quantities.
[3]Wire range is limited, as noted.
[4]Contact Customer Assistance Hotline for Tooling Application.
[5]Receptacle Material = Phos. Brz.

.205 Series

Wire Size Circular Mils [mm²]	Receptacle Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Fits Tab Thickness	Part Numbers		
						Loose Piece	Tape Mounted	Strip Form
22-18 509-1,900 [0.26-0.96]	B	**.250** 6.35	Red	**.135** 3.43	**.020** 0.51	640909-1[1]	640909-2	—
	B				**.032** 0.81	640911-1	640911-2	—
16-14 2,050-5,180 [1.04-2.62]	B	**.250** 6.35	Blue	**.170** 4.32	**.020** 0.51	640913-1	640913-2	—
	B				**.032** 0.81	640915-1	640915-2	—

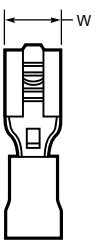


.205 Series

[1]Available in small packaging quantities.

.187 Series

Wire Size Circular Mils [mm²]	Receptacle Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Fits Tab Thickness	Part Numbers		
						Loose Piece	Tape Mounted	Strip Form
26-24 238-475 [0.12-0.24]	B	**.230** 5.84	Yellow	**.082** 2.08	**.020** 0.51	641321-1[2]	641321-2[3]	—
22-18 509-1,900 [0.26-0.96]	B	**.230** 5.84	Red	**.135** 3.43	**.020** 0.51	640917-1[1]	640917-2	640916-1
16-14 2,050-5,180 [1.04-2.62]	B	**.230** 5.84	Blue	**.170** 4.32	**.020** 0.51	640919-1[1]	640919-2	640918-1



.187 Series

[1]Available in small packaging quantities.
[2]Contact Customer Assistance Hotline for Tooling Application.
[3]Not UL listed or CSA certified.

For Complete Product Information , Order Catalog 82004.

Standard Terminals and Splices

PIDG FASTON Receptacles

Material and Finish:

Insulation—Nylon
Receptacle Body—Brass per ASTM B-36, tin plated per MIL-T-10727
Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Receptacle Style:

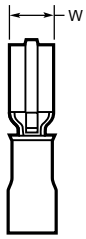
A—No dimple, with wire stop
B—Dimple, with wire stop

Terminals and Splices (Continued)

.110 Series, Standard

Wire Size Circular Mils [mm²]	Receptacle Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Fits Tab Thickness	Part Numbers		
						Loose Piece	Tape Mounted	Strip Form
22-18 509-1,900 [0.26-0.96]	A	**.148** 3.76	Natural	**.110** 2.79	**.020** 0.51	61060-1[1,2,3]	61060-2[1,3]	61059-2[1,3]
	B	**.148** 3.76	Natural	**.110** 2.79	**.032** 0.81	60894-1[1,2,3]	60894-2[1,3]	—

[1]Not UL listed or CSA certified.
[2]Available in small packaging quantities.
[3]Contact Customer Assistance Hotline for Tooling Application.

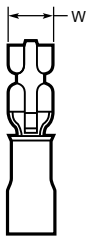


.110 Series, Standard

.110 Series, Low Insertion

Wire Size Circular Mils [mm²]	Receptacle Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Fits Tab Thickness	Part Numbers		
						Loose Piece	Tape Mounted	Strip Form
22-18 509-1,900 [0.26-0.96]	A	**.160** 4.06	Red	**.140** 3.56	**.016** 0.41	640921-1[1]	—	—
					.020 0.51	640923-1[2]	640923-2	640922-1
					.032 0.81	640925-1[2]	640925-2	—
16-14 2,050-5,180 [1.04-2.62]	B	**.160** 4.06	Blue	**.140** 3.56	**.016** 0.41	640927-1[1]	—	—
	A	**.160** 4.06	Blue	**.140** 3.56	**.020** 0.51	640929-1[2]	640929-2	—
					.032 0.81	640931-1	640931-2	—

[1]Not UL listed or CSA certified.
[2]Available in small packaging quantities.



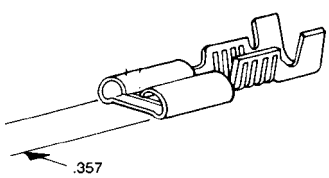
.110 Series, Low Insertion

312 Series Receptacles Straight Insulation Support

Premier Line

(0.312 x .032 tab fit)
Stock Thickness: .016

Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
16-12	.160 or (2) .110 Max.	Tin Plated Brass	61399-1
14-10	.150-.200	Silver Plated Brass	63820-1[1]



Standard Terminals and Splices

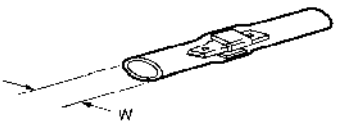
Terminals and Splices (Continued)

PIDG FASTON Receptacles

Line Splice Connector for "250" Series Terminals

Material

Insulation — Vinyl
Color — Natural
Splice Body — Brass per ASTM B-36
Plating — Tin per MIL-T-10727 except where noted.

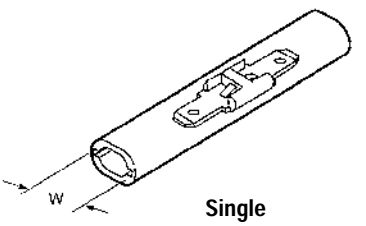


Wire Size	Plating	Dim. W	Part Numbers Loose Pieces
22-10	Unplated	**.409** 10.39	1-321235-0
	Tin	**.409** 10.39	1-321235-1

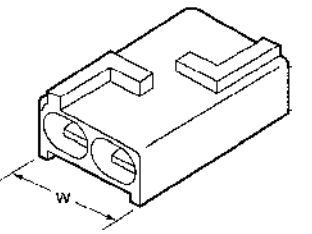
Line Splice Connector for "187" Series Terminals

Material

Housing — Nylon
Splice Body — Brass per ASTM B-36



Single



Dual

Type	Housing Color	Dim. W	Temperature Rating	Part Numbers Loose Pieces
Single	Natural	**.345** 8.76	—	360035-1
Dual	Natural	**.650** 16.51	105°C	360025-1

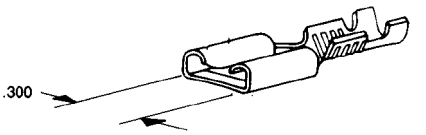
Standard Terminals and Splices

250 Series FASTON Receptacles Straight Insulation Support

Premier Line

(0.250 x .032 tab fit)

Terminals and Splices (Continued)

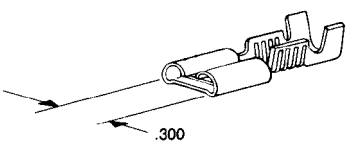


Wire Range AWG	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
24-20	**.030-.070** 0.76-1.78	**.016** 0.41	Tin Plated Brass	61368-1
22-18	**.060-.100** 1.52-2.54	**.016** 0.41	Brass	42640-1
			Tin Plated Brass	42640-2
18-14	**.060-.110** 1.52-2.79	**.018** 0.46	Tin Plated Brass	61375-1
	.060-.110 1.52-2.79	**.016** 0.41	Nickel Plated Steel	63688-1
	.120-.170 3.05-4.32	**.016** 0.41	Nickel Plated Steel	42219-1
16-12 or (2) 18	**.210-.265** 5.33-6.73	**.018** 0.46	Nickel Plated Steel	42579-1
14-10 (2) 14	**.225-.275** or (2) .140 max. [5.71-6.98]	**.018** 0.46	Tin Plated Brass	60635-1[1]
			Brass	60635-3[1]
12-10	**.150-.200** 3.81-50.8	**.018** 0.46	Tin PlatedBrass	62428-2
			Tin Phos. Brz.	62428-3
10-8 (2) 12	**.230-.280** (2) .160 [5.84-7.11]	**.018** 0.46	Tin Plated Brass	62998-2[2]

[1]9,600 CMA max.
[2]UL/CSA—10 AWG only.

Budget Line

(0.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.090-.130** 2.29-3.30	Brass	42510-1
		Tin Plated Brass	42510-2
20-14	**.085-.135** 2.16-3.43	Brass	63648-1[1]
18-14	**.120-.170** 3.05-4.32	Brass	42400-1
		Tin Plated Brass	42400-2
		Silver Plated Brass[2]	61107-1

[1].012 stock (multiple circuit housings).
[2]Stress relieved

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

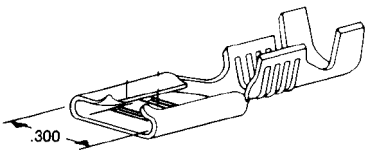
Standard Terminals and Splices

Terminals and Splices (Continued)

250 Series FASTON Receptacles Straight Insulation Support

Economy Line

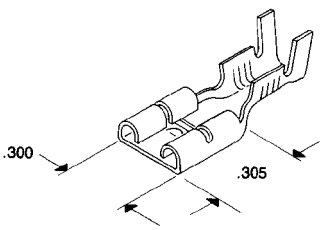
(0.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.090-.130** 2.29-3.30	Brass	42743-1
		Tin Plated Brass	42743-2
18-14	**.120-.170** 3.05-4.32	Brass	42660-1
		Tin Plated Brass	42660-2
	.150-.210 3.81-5.33	Brass	42692-1
		Tin Plated Brass	42692-2

Low Insertion Force Line — Premier

(.250 x .032 tab fit)



Wire Range AWG	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
22-18	**.090-.130** 2.29-3.30	**.016** 0.41	Tin Plated Brass	63609-2
18-14	**.120-.170** 3.05-4.32	**.018** 0.46	Tin Plated Brass	63537-2
		.016 0.41	Nickel Plated Steel	63674-1
14-10	**.150-.200** 3.81-5.08	**.018** 0.46	Silver Plated Brass	63435-1[1]
	.225-.275 or (2) .190 max.	**.018** 0.46	Tin Plated Brass	63539-1[1]

Low Insertion Force Line — Budget

(.250 x .032 tab fit)

Wire Range AWG	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
18-14	**.120-.170** 3.05-4.32	**.016** 0.41	Brass	63306-1
			Tin Plated Brass	63306-2
16-12 or (2) 18	**.210-.265** or (2) .220 max.	**.018** 0.46	Brass	63757-1
14-10	**.150-.200** 3.81-5.08	**.018** 0.46	Tin Plated Brass	63365-2[1]

[1]9,600 CMA max.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information , Order Catalog 82004.

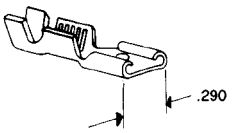
Standard Terminals and Splices

Terminals and Splices (Continued)

250 Series FASTON Receptacles Straight Insulation Support

AMPLIVAR FASTON Receptacles (for use with magnet wire)

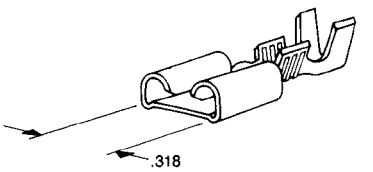
(0.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
18-14 or (2) 17	**.120-.170** or (2) .060 Max.	Tin Plated Brass	60385-2

Premier Line FASTON Receptacles for Hermetic Header Tabs

(0.250 x .032 tab fit)
Stock Thickness: .018

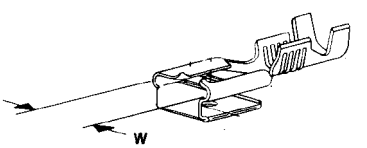


Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
14-10	**.150-.200**	Tin Plated Brass[1]	42437-2[3]
	3.81-5.08	Tin Plated Phos. Brz.[2]	42437-5[3]

[1]Recommended for external use only.
[2]For internal or external use.
[3]9,600 CMA max.

Economy Line (Receptacle and Tab Combination)

(.250 x .032 tab fit)



Wire Range AWG	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
22-18	**.060-.100** 1.52-2.54	**.015** 0.38	Brass	61988-1
			Tin Plated Brass	61988-2
18-14	**.120-.170** 3.05-4.32	**.015** 0.38	Brass	61944-1
			Tin Plated Brass	61944-2
	.120-.170 3.05-4.32	**.032-.016**[1] 0.81-0.41	Brass	62109-1
			Tin Plated Brass	62109-2
	.120-.170 3.05-4.32	**.015** 0.38	Brass	62223-1[2]
14-10	**.150-.200** 3.81-5.08	**.015** 0.38	Brass	62253-1
			Tin Plated Brass	62253-2

[1]Dual thickness.
[2]Stress relieved.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information , Order Catalog 82004.

Standard Terminals and Splices

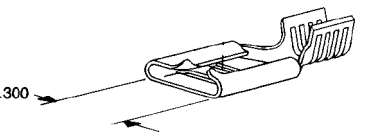
Terminals and Splices (Continued)

250 Series FASTON Receptacles Straight Non-Insulation Support

Economy Line

(.250 x .032 tab fit)
Stock Thickness: .016

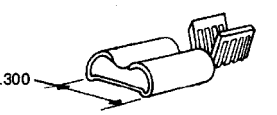
Wire Range AWG	Material and Finish	Terminal Part No.
18-14	Brass	42845-1
	Tin Plated Brass	42845-2



Moldable Line

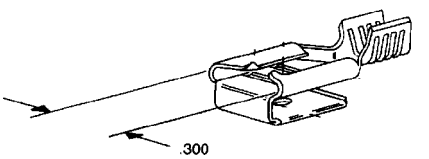
(.250 x .032 tab fit)
Stock Thickness: .016

Wire Range AWG	Material and Finish	Terminal Part No.
18-14	Brass	60938-1
	Tin Plated Brass	60938-2



Receptacle and Tab Combination

(.250 x .032 tab fit)
Stock Thickness: .015



Wire Range AWG	Material and Finish	Terminal Part No.
18-14	Pre-Tin Brass	62276-1
14-10[1]	Pre-Tin Brass	62068-1

[1]9,600 CMA max.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

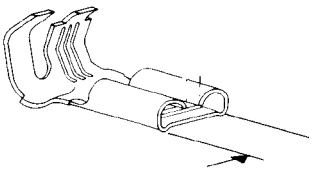
Standard Terminals and Splices

Terminals and Splices (Continued)

250 Series FASTON Receptacles Flag Tab-Lok Insulation Support

Premier Line Flag

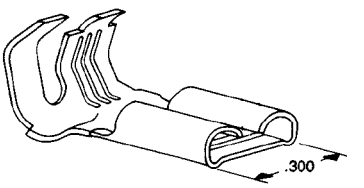
(.250 x .032 tab fit)
Insulation Diameter: .110-.210



Wire Range AWG	Stock Thickness	Material and Finish	Terminal Part No.
18-12	**.018** 0.46	Nickel Plated Steel	41531-1
	.016 0.41	Nickel Plated Steel	42404-1

Budget Line Flag

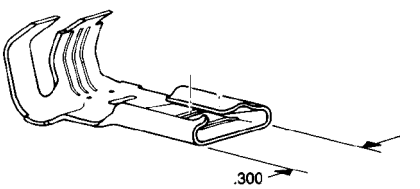
(.250 x .032 tab fit)
Insulation Diameter: .110-.210
Stock Thickness: .016



Wire Range AWG	Material and Finish	Terminal Part No.
18-12	Brass	42511-1
	Tin Plated Brass	42511-2

Economy Line Flag

(.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
22-16	**.070-.130** 1.78-3.30	Brass	63577-1
18-12	**.110-.210** 2.79-5.33	Brass	42742-1
		Tin Plated Brass	42742-2

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

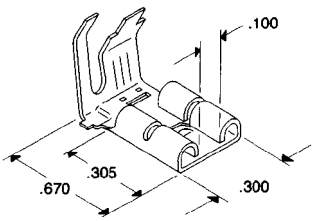
Standard Terminals and Splices

Terminals and Splices (Continued)

250 Series FASTON Receptacles Flag Tab-Lok Insulation Support

Premiere Line Flag

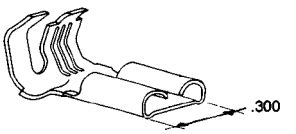
(.250 x .032 tab fit)



Wire Range AWG	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
18-12	**.110-.210** 2.79-5.33	**.016** 0.41	Brass	63445-1
			Tin Plated Brass	63445-2
			Nickel Plated Steel	63604-1
		.018 0.46	Tin Plated Brass	63555-2

Moldable Line Flag

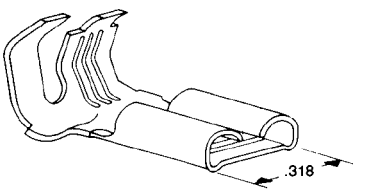
(.250 x .032 tab fit)
Insulation Diameter: .110-.210



Wire Range AWG	Stock Thickness	Material and Finish	Terminal Part No.
18-12	**.016** 0.41	Brass	60641-1

Flag FASTON Receptacles for Hermetic Header Tabs

(.250 x .032 tab fit)
Insulation Diameter: .110-.210
Stock Thickness: .018



Wire Range AWG	Wire Range CMA	Material and Finish	Terminal Part No.
18-12	—	Tin Phos. Brz.	60274-2[3]
12-10	6,000-10,600	Tin Plated Brass	60851-1[1]
		Silver Plated Brass	60851-2[1]
		Silver Plated Phos. Brz.	42563-6[2]
		Tin Plated Phos. Brz.	42563-8[2]

[1]Recommended for external use only.
[2]For internal or external use.
[3]Left hand for internal or external use.

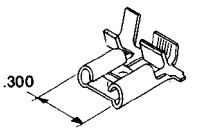
Standard Terminals and Splices

250 Series FASTON Receptacles Flag "F—Crimp" Insulation Support

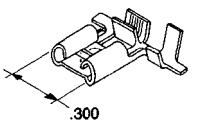
Terminals and Splices (Continued)

Premier Line Flag

(.250 x .032 tab fit)
Stock Thickness: .016



Right Handed Flag



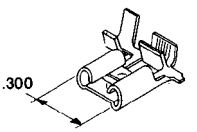
Left Handed Flag

Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.060-.100** 1.52-2.54	Brass	62813-1[1]
		Tin Plated Brass	62813-2[1]
		Tin Plated Brass	62814-2[2]
18-14	**.110-.160** 2.79-4.06	Brass	63011-1[1]
		Tin Plated Brass	63011-2[1]
		Tin Plated Brass	63012-2[2]

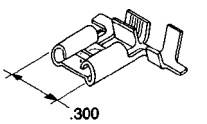
[1]Left handed flag.
[2]Right handed flag.

Budget Line Flag

(.250 x .032 tab fit)
Stock Thickness: .016



Right Handed Flag



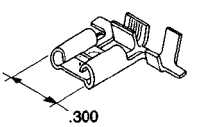
Left Handed Flag

Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.060-.100** 1.52-2.54	Brass	62718-1[2]
		Tin Plated Brass	62718-2[2]
18-14	**.110-.160** 2.79-4.06	Brass	63009-1[1]
		Tin Plated Brass	63009-2[1]
		Brass	63010-1[2]
		Tin Plated Brass	63010-2[2]

[1]Left handed flag.
[2]Right handed flag.

Economy Line Flag

(.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
18-14	**.110-.160** 2.79-4.06	Brass	63096-1

For Complete Product Information , Order Catalog 82004.

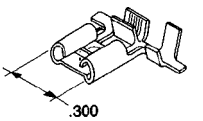
Standard Terminals and Splices

Terminals and Splices (Continued)

250 Series FASTON Receptacles Flag "F—Crimp" Insulation Support

Low Insertion Force Line

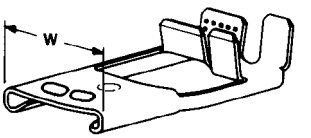
(.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
18-14 2 (18)	**.110-.200** 2.79-5.08	Brass	63538-1

Commercial Line Flag

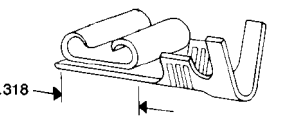
(.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Dim. W	Material and Finish	Terminal Part No.
24-20	**.048-.078** 1.22-1.98	**.293** 7.44	Tin Plated Brass	60736-2
22-16	**.090-.140** 2.29-3.56	**.293** 7.44	Brass	62418-1
			Tin Plated Brass	62418-2
18-14	**.090-.140** 2.29-3.56	.300 7.62	Brass	60290-1
			Tin Plated Brass	60290-2

Reversable Flag FASTON Receptacles Straight End Feed

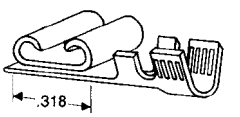
(.250 x .032 tab fit)
Stock Thickness: .016



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
18-14	**.090-.130** 2.29-3.30	Brass	62048-1
		Tin Plated Brass	62048-2
	.170-.220 4.32-5.59	Tin Plated Brass	60764-2

Reversable Flag FASTON Receptacles for Hermetic Header Tabs Side Feed

(.250 x .032 tab fit)
Stock Thickness: .018



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.085-.150** 2.16-3.81	Tin Plated Phos. Brz.	63137-1
16-12	**.130-.170** 3.30-4.32	Tin Plated Phos. Brz.[1]	61188-1[2]

[1]For interal or external use.
[2]Bends terminal 90°. For 180° bend use applicator number 687616-2 with Press 694234-7.

For Complete Product Information , Order Catalog 82004.

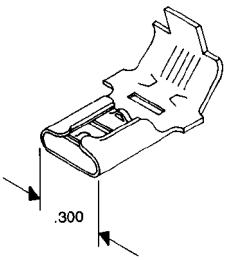
Standard Terminals and Splices

250 Series FASTON Receptacles Flag Tab-Lok Non-Insulation Support

Economy Line Flag

(.250 x .032 tab fit)
Stock Thickness: .016

Terminals and Splices (Continued)

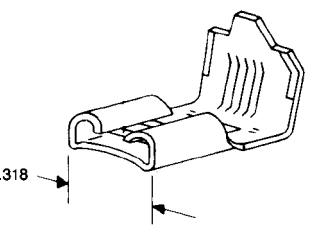


Wire Range AWG	Material and Finish	Terminal Part No.
18-12	Pre-Tin Brass	61177-2[1]
12-10 or (2) 14	Brass	62011-1[2]
	Tin Plated Brass	62011-2[2]

[1]Right handed flag.
[2]Right or left handed. Carrier is in front for through splicing.

Flag FASTON Receptacles for Hermetic Header Tabs

Stock Thickness: .018



Wire Range AWG	Material and Finish	Terminal Part No.
18-12	Tin Plated Phos. Brz.	62056-6[2]
	Tin Plated Brass	62056-3[2]
	Tin Plated Brass	62056-4[4]
12-10	Tin Plated Brass	62057-3[3]
	Silver Plated Phos. Brz.	62057-7[4]
	Tin Plated Brass	62022-2[1]

[1]Right or left handed. Carrier is in front for through splicing.
[2]Right hand. Reverse reel.
[3]Right hand.
[4]Left hand.

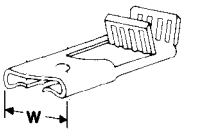
Standard Terminals and Splices

250 Series FASTON Receptacles Flag "F—Crimp" Non-Insulation Support

Commercial Line Flag

(.250 x .032 tab fit)
Stock Thickness: .018

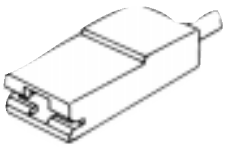
Terminals and Splices (Continued)



Wire Range AWG	Dim. W	Material and Finish	Terminal Part No.
12-10[1] (2) 12[2] (2) 14	**.300** 7.62	Tin Plated Brass	60960-3

[1]Stranded or solid.
[2]Stranded only.

Post-Insulation Pods for FASTON Receptacles



Part Number: 171706-1
Accepts Terminals:
"250" Series FASTON Receptacles 41729, 170183, 170187, 170213
Package Quantity: 2000

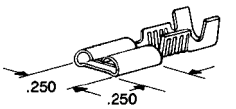
Standard Terminals and Splices

Terminals and Splices (Continued)

205 Series FASTON Receptacles Straight Insulation Support and Straight Non-Insulation Support

Premiere Line Insulation Support

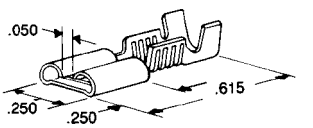
See below for tab configuration



Wire Range AWG	Fits Tab	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
22-18	**.032** 0.81	**.085-.125** 2.16-3.17	**.012** 0.30	Tin Plated Brass	42299-2
	.020 0.51	**.085-.125** 2.16-3.17	**.012** 0.30	Tin Plated Brass	42198-2
18-14	**.032** 0.81	**.130-.180** 3.30-4.57	**.016** 0.41	Tin Plated Brass	42233-2

Economy Line Insulation Support

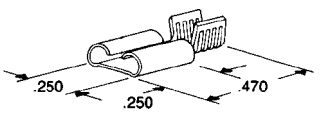
Stock Thickness: .012
See below for tab configuration



Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.020** 0.51	**.085-.125** 2.16-3.17	Brass	42710-1
			Tin Plated Brass	42710-2
	.032 0.81	**.085-.125** 2.16-3.17	Tin Plated Brass	60904-2
18-14	**.050** 1.27	**.130-.180** 3.30-4.57	Tin Plated Brass	42713-2

Premiere Line Non-Insulation Support

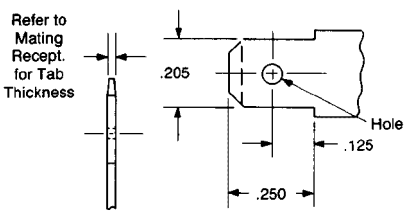
See below for tab configuration



Wire Range AWG	Fits Tab	Stock Thickness	Material and Finish	Terminal Part No.
22-18	**.020** 0.51	**.012** 0.30	Tin Plated Brass	42197-2[1]
18-14	**.032** 0.81	**.016** 0.41	Phos. Brz.	42239-4

[1]No slots.

Tab Configuration Dimensions Mates with all "205" Series Receptacles



Configuration 1

For Complete Product Information , Order Catalog 82004.

Standard Terminals and Splices

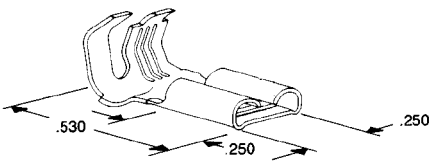
Terminals and Splices (Continued)

205 Series FASTON Receptacles Flag Tab-Lok Insulation Support

Premiere Line Flag

Insulation Diameter: .110-.170

See below for tab configuration

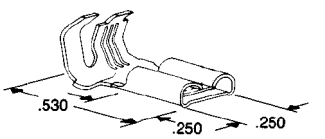


Wire Range AWG	Fits Tab	Stock Thickness	Material and Finish	Terminal Part No.
22-18	**.020** 0.51	**.012** 0.30	Brass	42199-1
			Tin Plated Brass	42199-2
20-14	**.032** 0.81	**.016** 0.41	Tin Plated Brass	42234-2

Economy Line Flag

Insulation Diameter: .100-.170

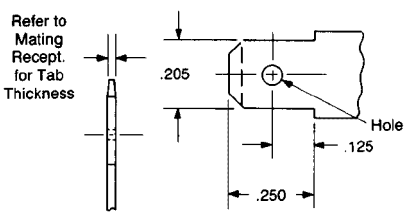
See below for tab configuration



Wire Range AWG	Fits Tab	Stock Thickness	Material and Finish	Terminal Part No.
20-14	**.032** 0.81	**.016** 0.41	Brass	60195-1[1]
			Tin Plated Brass	60195-2[1]

[1]Moldable.

Tab Configuration Dimensions Mates with all "205" Series Receptacles

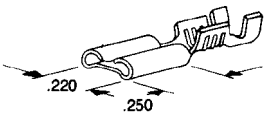


Configuration 1

Standard Terminals and Splices

Terminals and Splices (Continued)

187 Series FASTON Receptacles Straight Insulation Support



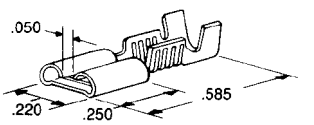
Premiere Line

Stock Thickness: .012

Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.020** 0.51	**.040-.070** 1.02-1.78	Tin Plated Brass	60573-1
			Brass	60573-2
	.020 0.51	**.060-.110** 1.52-2.79	Tin Plated Brass	62138-1
			Brass	62138-2
	.032 0.81	**.040-.070** 1.02-1.78	Tin Plated Brass	62181-1
	.020 0.51	**.040-.070** 1.02-1.78	Tin Plated Brass	62187-1
20-16	**.020** 0.51	**.090-.130** 2.29-3.30	Brass	42452-1
			Tin Plated Brass	42452-2
	.020 0.51	**.090-.130** 2.29-3.30	Nickel Plated Steel	60621-1
	.032 0.81	**.090-.130** 2.29-3.30	Brass	61758-1
	.020 0.51	**.060-.110** 1.52-2.79	Brass	62137-1
			Tin Plated Brass	62137-2
18-16 or (2) 18	**.020** (2) 0.51	**.105 max.** 2.67	Brass	60487-1
			Tin Plated Brass	60487-2
	.032 (2) 0.81	**.105 max.** 2.67	Tin Plated Brass	61945-1

Budget Line

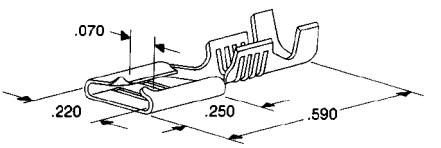
Insulation Diameter: .090-.130
Stock Thickness: .012



Wire Range AWG	Fits Tab	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	Brass	42617-1
		Tin Plated Brass	42617-2
	.032 0.81	Brass	61919-1

Economy Line

Stock Thickness: .012



Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	**.090-.130** 2.29-3.30	Brass	42801-1
			Tin Plated Brass	42801-2
	.032 0.81	**.090-.130** 2.29-3.30	Brass	60196-1
			Tin Plated Brass	60196-2

Standard Terminals and Splices

Terminals and Splices (Continued)

187 Series FASTON Receptacles Straight Insulation Support

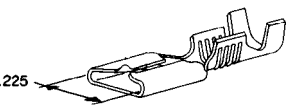
Low Insertion Force Line—Budget

Stock Thickness: .012

Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	**.090-.130** 2.29-3.30	Brass	63475-1
			Tin Plated Brass	63475-2
	.032 0.81	**.090-.130** 2.29-3.30	Tin Plated Brass	63477-2

Commercial Line

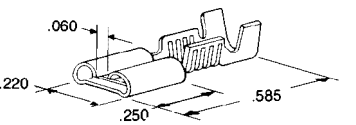
Stock Thickness: .014



Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	**.150-.190** 3.81-4.83	Brass	62016-1
			Tin Plated Brass	62016-2
18-14 or 2 (16)	**.020** 0.51	**.180-.230** or (2) .110 max.	Brass	60742-1
			Tin Plated Brass	60742-2
	.032 0.81	**.180-.230** or (2) .110 max.	Brass	63596-1

Moldable Line

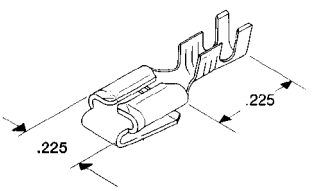
Insulation Diameter: .090-.130
Stock Thickness: .012

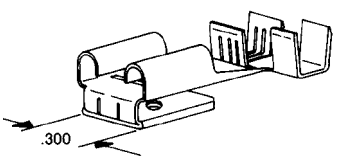


Wire Range AWG	Fits Tab	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	Brass	60214-1
		Tin Plated Brass	60214-2

Commercial Line (Receptacle and Tab Combination)

Tab Stock Thickness: .020
Receptacle Stock Thickness: .014





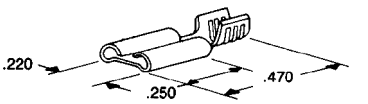
Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	**.090-.130** 2.29-3.30	Tin Plated Brass	62026-1
			Brass	62026-2
	.032 0.81	**.090-.130** 2.29-3.30	Brass	63646-1
	.020 0.51	**.060-.110** 1.52-2.79	Tin Plated Brass	62139-1

For Complete Product Information , Order Catalog 82004.

Standard Terminals and Splices

Terminals and Splices (Continued)

187 Series FASTON Receptacles Straight Non-Insulation Support Receptacles



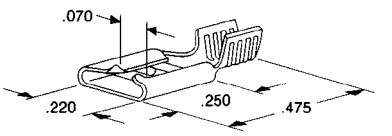
Premiere Line

Stock Thickness: .012

Wire Range AWG	Fits Tab	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	Tin Plated Brass	42373-2

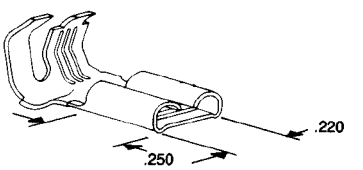
Economy Line

Stock Thickness: .012



Wire Range AWG	Fits Tab	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	Brass	42799-1
		Tin Plated Brass	42799-2

187 Series FASTON Receptacles Flag Tab-Lok Insulation Support



Premiere Line Flag

Stock Thickness: .012

Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	**.110-.170** 2.79-4.32	Brass	42486-1
			Tin Plated Brass	42486-2
			Nickel Plated Steel	42486-3
	.032 0.81	**.110-.170** 2.79-4.32	Tin Plated Brass	62591-1

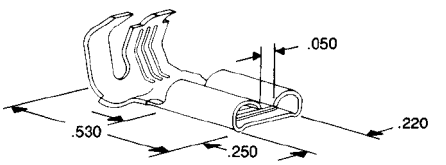
Standard Terminals and Splices

Terminals and Splices (Continued)

187 Series FASTON Receptacles Insulation Support

Budget Line Flag

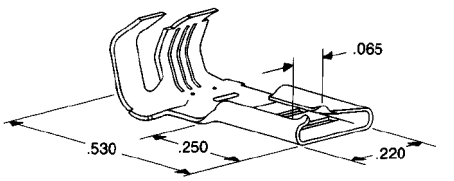
Stock Thickness: .012



Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	**.170-.225** 4.32-5.71	Brass	62817-1
		.110-.170 2.79-4.32	Brass	42618-1
			Tin Plated Brass	42618-2

Economy Line Flag

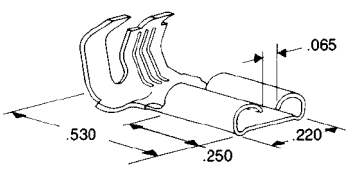
Insulation Diameter: .110-.170
Stock Thickness: .012



Wire Range AWG	Fits Tab	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	Brass	42800-1
		Tin Plated Brass	42800-2
	.032 0.81	Brass	60529-1
		Tin Plated Brass	60529-2

Moldable Line Flag

Insulation Diameter: .110-.170
Stock Thickness: .012



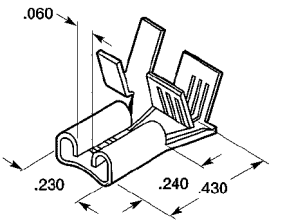
Wire Range AWG	Fits Tab	Material and Finish	Terminal Part No.
20-16	**.020** 0.51	Brass	61029-1
		Tin Plated Brass	61029-2

Terminals and Splices (Continued)

187 Series FASTON Receptacles Flag "F—Crimp" 125 Series

187 Series Center Strip Flag Insulation Support

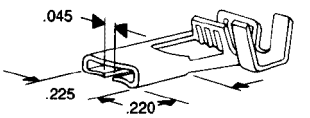
Stock Thickness: .016



Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
18-14	**.032** 0.81	**.060-.150** 1.52-3.81	Brass	63316-1
	.020 0.51	**.060-.150** 1.52-3.81	Brass	63512-1

187 Series Commercial Line Flag Insulation Support

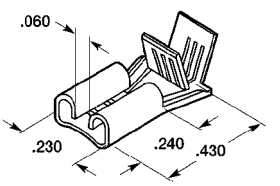
Stock Thickness: .012



Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.020** 0.51	**.060-.070** 1.52-1.78	Brass	62085-1
			Tin Plated Brass	62085-2
20-16	**.020** 0.51	**.090-.130** 2.29-3.30	Brass	60755-1
			Tin Plated Brass	60755-2

187 Series Center Strip Flag Non-Insulation Support

(1.87 x .032 tab fit)
Stock Thickness: .016

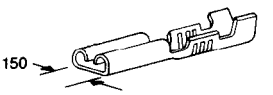


Wire Range AWG	Material and Finish	Terminal Part No.
18-14	Brass	63317-1

Standard Terminals and Splices

Terminals and Splices (Continued)

110 Series FASTON Receptacles Straight Insulation Support



FASTON Receptacles

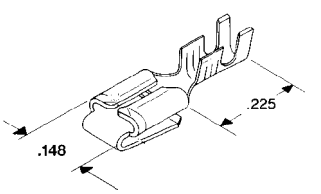
Stock Thickness: .010

Wire Range AWG	Fits Tab[1] Type	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
18-14	1	**.020** 0.51	**.040-.060** 1.02-1.52	Pre-Tin Brass	42067-1
		.016 0.41	**.040-.060** 1.02-1.52	Pre-Tin Brass	42415-1
22-18	1	**.020** 0.51	**.060-.100** 1.52-2.54	Pre-Tin Brass	42068-1
		.012 0.30	**.060-.100** 1.52-2.54	Pre-Tin Brass	60415-1
		.016 0.41	**.060-.100** 1.52-2.54	Pre-Tin Brass	60118-1
		.032 0.81	**.060-.100** 1.52-2.54	Pre-Tin Brass	60197-1
	3	**.032** 0.81	**.060-.100** 1.52-2.54	Pre-Tin Brass	60577-1
	2	**.020** 0.51	**.120-.140** 3.05-3.56	Pre-Tin Brass	60729-1
	1	**.025** 0.63	**.120-.140** 3.05-3.56	Pre-Tin Brass	61158-1
		.020 0.51	**.090-.130** 2.29-3.30	Pre-Tin Brass	62094-1
	—	**.016** 0.41	**.090-.130** 2.29-3.30	Pre-Tin Brass	62523-1[2]
20-16	1	**.020** 0.51	**.120-.140** 3.05-3.56	Pre-Tin Brass	61400-1
			.060-.100 1.52-2.54	Pre-Tin Brass	61408-1
		.032 0.81	**.120-.140** 3.05-3.56	Pre-Tin Brass	62050-1
		.020 0.51	**.150-.170** 3.81-4.32	Tin Plated Brass	62191-1

[1]See page 385.
[2].012 stock.

Commercial Line FASTON (Receptacle and Tab Combination)

Tab Thickness: .020
Receptacle Stock Thickness: .010

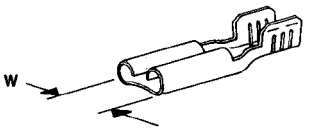


Wire Range AWG	Fits Tab	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.018** 0.46	**.080-.120** 2.03-3.05	Brass	63242-1
	.020 0.51	**.080-.120** 2.03-3.05	Tin Plated Brass	62003-2

Standard Terminals and Splices

Terminals and Splices (Continued)

110 Series FASTON Receptacles Straight Non-Insulation Support



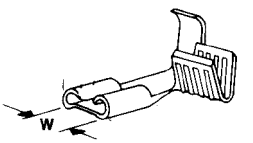
FASTON Receptacles

Stock Thickness: .010

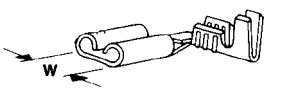
Wire Range AWG	Fits Tab[2] Type	Fits Tab	Material and Finish	Terminal Part No.
24-22	—	**.016** 0.41	Brass	61818-1
20-18 or (2) 20	1	**.020** 0.51	Pre-Tin Brass	42399-1
		.032 0.81	Pre-Tin Brass	60601-1
20-18	1, 2, 3	**.020** 0.51	Pre-Tin Brass	62850-1[1]
			Tin Plated Brass	62850-2[1]
20-16	1	**.016** 0.41	Pre-Tin Brass	61457-1
18-14	1	**.020** 0.51	Pre-Tin Brass	62852-1[3]

[1]No dimple..
[2]See page 385.
[3]Side feed.

110 Series FASTON Receptacles "F—Crimp" Insulation Support



A
Fits Tab Type 1[1]



B
Fits Tab Type 1[1]

Wire Range AWG	Style	Fits Tab	Insulation Diameter	Stock Thickness	Dim. W	Material and Finish	Terminal Part No.
22-18	A	**.016** 0.41	**.065-.100** 1.65-2.54	**.010** 0.25	**.148** 3.76	Pre-Tin Brass	61459-1
		.020 0.51	**.065-.100** 1.65-2.54	**.010** 0.25	**.148** 3.76	Pre-Tin Brass	61372-1
				.012 0.30	**.148** 3.76	Tin Plated Brass	60605-1
		.025 0.63	**.065-.100** 1.65-2.54	**.010** 0.25	**.148** 3.76	Pre-Tin Brass	61530-1
	B	**.020** 0.51	**.060-.100** 1.52-2.54	**.010** 0.25	**.148** 3.76	Pre-Tin Brass	61481-1
				.012 0.30	**.148** 3.76	Tin Plated Brass	61070-1
						Brass	61070-2
		.032 0.81	**.060-.100** 1.52-2.54	**.010** 0.25	**.148** 3.76	Pre-Tin Brass	62336-1

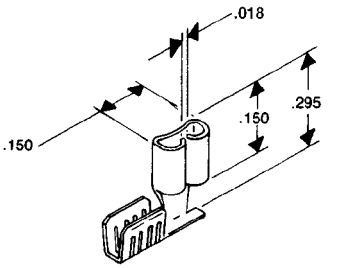
[1]See page 385.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Standard Terminals and Splices

110 Series Flag FASTON "F—Crimp" Non-Insulation Support

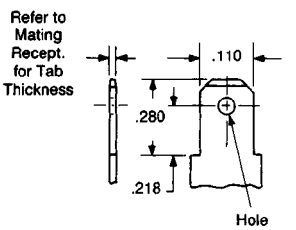
Terminals and Splices (Continued)



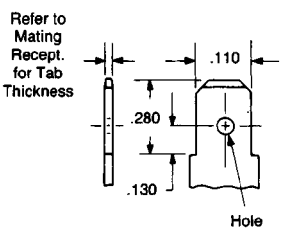
Wire Range AWG	Fits Tab[1] Type	Fits Tab	Stock Thickness	Material and Finish	Terminal Part No.
22-16	—	**.020** 0.51	**.012** 0.30	Brass	60991-1
	2	**.020** 0.51	**.010** 0.25	Pre-Tin Brass	61549-1
	1	**.020** 0.51	**.010** 0.25	Pre-Tin Brass	62321-1

[1]See page below.

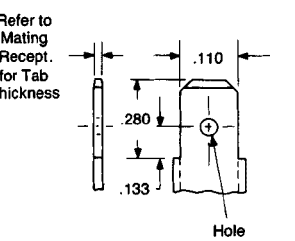
Mating 110 Series FASTON Tab Designs



Mating 110 Series Tab Dimension Type 1



Mating 110 Series Tab Dimension Type 2



Mating 110 Series Tab Dimension Type 3

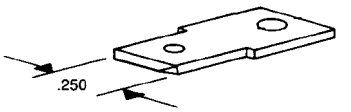
Standard Terminals and Splices

250 Series FASTON Tabs (Mates with all "250" Series FASTON Receptacles)

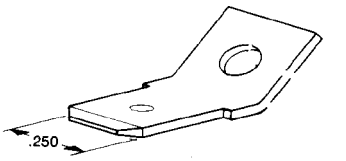
250 Series Stud Mount Type Tabs

Stock Thickness: .032
Dimple (Both Sides)

Terminals and Splices (Continued)

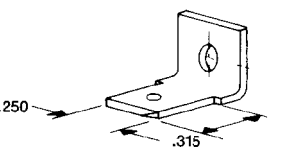


A

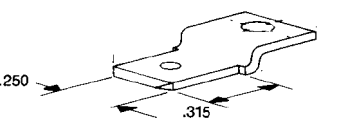


B

Style	Stud Diameter	Material and Finish	Terminal Part No.
A	**.177** 4.50	Brass	63038-2
	—	Nickel Plated Steel	42559-1
B	**.130** 3.30	Tin Plated Brass	42822-2
	.145 3.68	Tin Plated Brass	42822-4
	.171 4.34	Brass	60465-1
		Tin Plated Brass	60465-2
	.203 5.16	Tin Plated Brass	61365-1
	.197 5.00	Tin Plated Brass	61499-1



C



D

Style	Stud Diameter	Material and Finish	Terminal Part No.
C	**.130** 3.30	Tin Plated Brass	42095-1
	.130 3.30	Tin Plated Brass	42117-2
	.171 4.34	Brass	42214-1
		Tin Plated Brass	42214-2
D	**.130** 3.30	Tin Plated Brass	42506-2

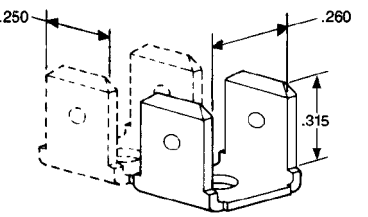
Standard Terminals and Splices

250 Series FASTON Tabs (Mates with all "250" Series FASTON Receptacles)

250 Series Stud Mount Type Tabs

Stock Thickness: .032
Dimple (Both Sides)

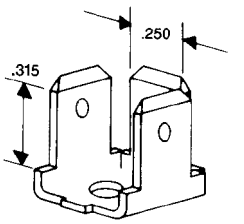
Terminals and Splices (Continued)



E

Style	Pairs	Stud Diameter	Material and Finish	Terminal Part No.
E	—	**.130** 3.30	Tin Plated Brass	42115-4[1]
	1	**.171** 4.34	Tin Plated Brass	42802-1
	1	**.097** 2.46	Tin Plated Brass	60080-2

[1]In continuous strip-form.



F

Style	Stud Diameter	Material and Finish	Terminal Part No.
F	**.130** 3.30	Brass	62261-1

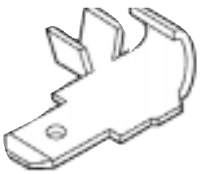
Standard Terminals and Splices

Terminals and Splices (Continued)

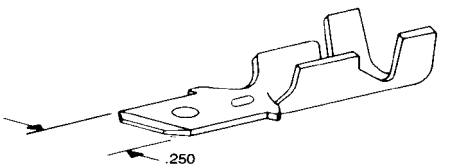
250 Series FASTON Tabs (Mates with all "250" Series FASTON Receptacles)

Wire Crimp Type Tabs

Tab Thickness: .032



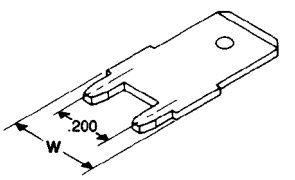
Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
18-14	**.080-.120** 2.03-3.05	Tin Plated Brass	42770-2



Wire Range AWG	Insulation Diameter	Stock Thickness	Material and Finish	Terminal Part No.
22-18	**.080-.120** 2.03-3.05	**.016** 0.41	Brass	42475-3
			Tin Plated Brass	42475-4
18-14	**.110-.150** 2.79-3.81	**.016** 0.41	Brass	42474-3
			Tin Plated Brass	42474-4
14-12	**.110-.170** 2.79-4.32	**.016** 0.41	Tin Plated Brass	61281-3

Printed Circuit Board Tab

Stock Thickness: .032
Board Hole Size: .055 ± .002 on Centers
[1]**Loose Piece Board Hole Size:** .060/.053 on Centers



Material and Finish	Dim. W	Terminal Part No.
Tin Plated Brass	**.295** 7.49	62409-1[1]
	.280 7.11	62650-1[2]
	.280 7.11	63650-1[2]

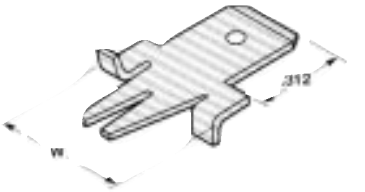
[1]Loose piece only.
[2]Insertion equipment available.

Standard Terminals and Splices

250 Series FASTON Tabs (Mates with all "250" Series FASTON Receptacles)

Stock Thickness: .032
Board Hole Size: .100 ± .002

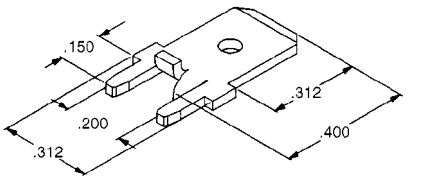
Terminals and Splices (Continued)



Material and Finish	Dim. W	Terminal Part No.
Tin Plated Brass	**.330** 8.38	63066-1[1]

[1]Insertion equipment available.

Stock Thickness: .032
Board Hole Size: .055 ± .002



Material and Finish	Terminal Part No.
Tin Plated Brass	63824-1[1]

[1]Insertion equipment available.

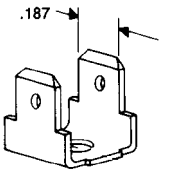
Standard Terminals and Splices

Terminals and Splices (Continued)

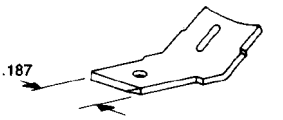
187 Series FASTON Tabs (Mates with all "187" Series FASTON Receptacles)

Stud Mount Type Tabs

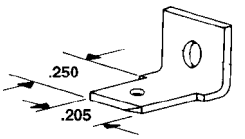
Hole In Tab



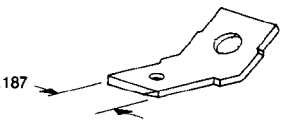
A



B



C

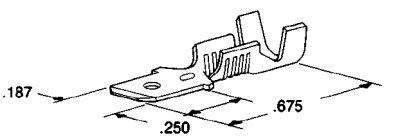


D

Style	Stud Diameter	Stock Thickness	Material and Finish	Terminal Part No.
A	**.130** 3.30	**.020** 0.51	Tin Plated Brass	61951-1
B	—	**.020** 0.51	Nickel Plated Steel	61960-1[1,3]
C	**.145** 3.68	**.020** 0.51	Tin Plated Brass	61407-3
D	**.130** 3.30	**.020** 0.51	Tin Plated Brass	61761-2[3]
D	**.145** 3.68	**.020** 0.51	Brass	62576-1[3]
D	**.171** 4.34	**.020** 0.51	Tin Plated Brass	61664-1[2]

[1]Weld tab.
[3]Bent 45°

Wire Crimp Type Tabs



Wire Range AWG	Tab Thickness	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.020** 0.61	**.080-.120** 2.03-3.05	Tin Plated Brass	42490-3
			Brass	42490-4
22-18	**.020** 0.61	**.120-.150** 3.05-3.81	Brass	60850-1
			Tin Plated Brass	60850-2
	.032 0.81	**.120-.150** 3.05-3.81	Tin Plated Brass	61687-2[1]

[1]Premilled dual stock thickness, Tab .032, Body .016.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

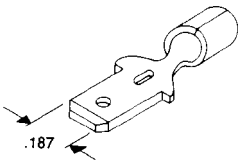
Standard Terminals and Splices

Terminals and Splices (Continued)

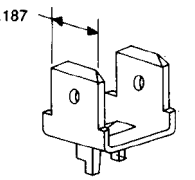
187 Series FASTON PCB Tabs (Mates with all "187" Series FASTON Receptacles)

Printed Circuit Board Tabs

Stock Thickness: .020



A

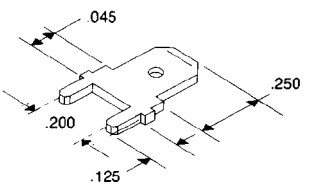


B

Type	Board Thickness	Material and Finish	Terminal Part No.
A	**.062** 1.57	Pre-Plated Brass	61907-1[1]
B	**.062** 1.57	Pre-Tin Brass	62221-1[2]

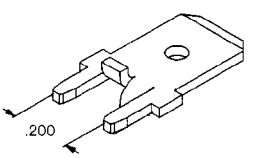
[1]Loose piece only.
[2]Insertion equipment available.

Printed Circuit Board Tab



Tab Thickness	Solder Tab Length	Material and Finish	Terminal Part No.
.032 0.81	**.125** 3.17	Tin Plated Brass	63525-1[1]
.020 0.51	**.125** 3.17	Tin Plated Brass	63603-1[2]

[1]Dimple
[2].055 Hole



Tab Thickness	Solder Tab Length	Material and Finish	Terminal Part No.
.020 0.51	**.150** 3.81	Tin Plated Brass	63823-1[1]

[1].055 Hole

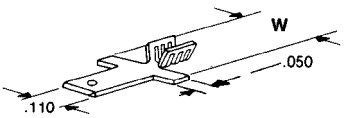
Standard Terminals and Splices

Terminals and Splices (Continued)

110 and 060 Series FASTON Tabs (110 Mates with all "110" Series FASTON Receptacles)

.110 Series Wire Crimp Type Tabs

Stock Thickness: .020

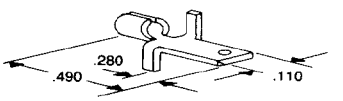


Wire Range AWG	Dim. W	Material and Finish	Terminal Part No.
22-18	**.155** 3.94	Pre-Tin Brass	62122-1
	.155 3.94	Pre-Tin Brass	62384-1
	—	Tin Plated Brass	63138-1[1,2]

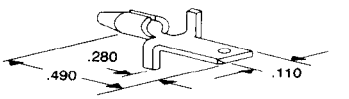
[1]Insulation support
[2].032 Stock

.110 Series Printed Circuit Board Only

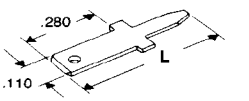
Stock Thickness: .020



A



B



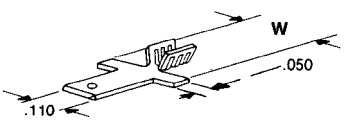
C

Style	Mating Hole Diameter	Material and Finish	Terminal Part No.
A	**.060-.055** 1.52-1.40	Tin Brass	61134-3[1]
B	**.067-.063** 1.70-1.60	Tin Brass	61968-1[2]
		Tin Brass	62437-1[1]
C	**.044-.048** 1.12-1.22	Tin Brass	62395-1[2]

[1]Loose piece only.
[2]Insertion machine available.

.060 Series Wire Crimp Type Tabs

Stock Thickness: .032



Wire Range AWG	Dim. W	Material and Finish	Terminal Part No.
23-19	**.140** 3.56	Tin Plated Brass	63497-1[1]

[1]AMPLIVAR

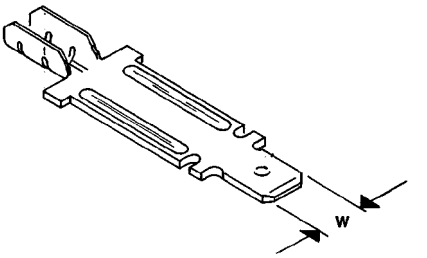
Standard Terminals and Splices

312 and 250 Series FASTON Tabs (High Temperature [343°C to 371°C]))

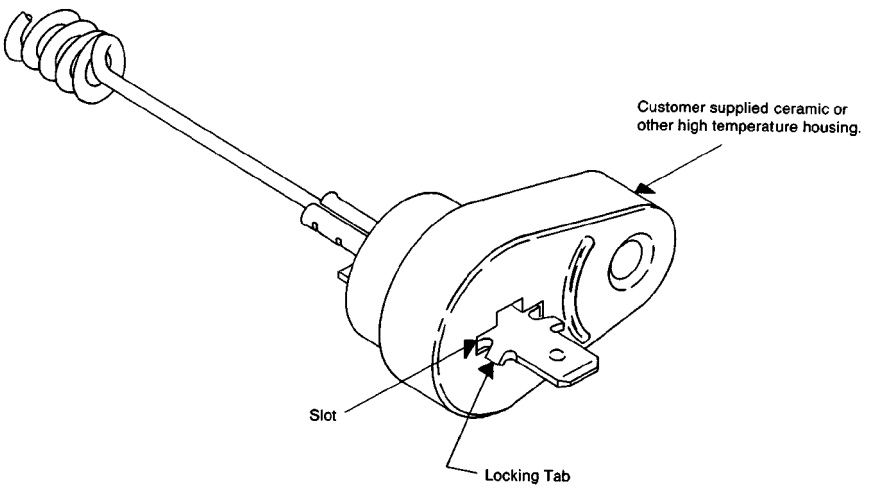
AMP's high-temperature tab is designed to crimp to heating element wire. The tab end protrudes through a ceramic/high-temperature housing for mating with either a standard 250 or 312 FASTON receptacle.

Stock Thickness: .032

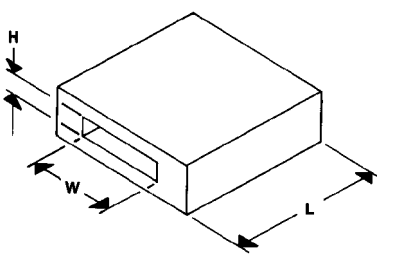
Terminals and Splices (Continued)



Series	Solid Wire Range AWG	Tab Thickness	Dim. W	Material and Finish	Terminal Part No.
312	20-15	**.032** 0.81	**.312** 7.92	Nickel Plated Steel	63300-1
250	20-15	**.032** 0.81	**.250** 6.35	Nickel Plated Steel	63301-1



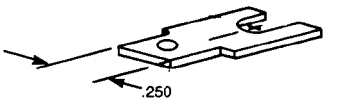
Recommended Housing Dimensions	
Slot = H x W	L
.070 x **.390** 1.78 x 9.91	**.640** 16.26



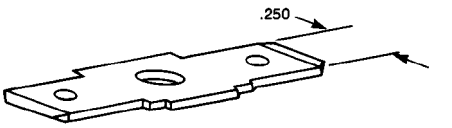
Standard Terminals and Splices

Terminals and Splices (Continued)

250 Series Test Tabs that mate with all "250" Series FASTON Receptacles



Mechanical
A



Electrical
B

Style	Stud Diameter	Material and Finish	Terminal Part No.
A	**.125** 3.17	Brass	60447-1[1]
B	**.145** 3.68	Brass	62627-2

[1]Mechanical test tab for use with AMP guage number 100505.

Test Tabs

The mechanical tab is mounted onto AMP guage 100505 for testing of receptacle insertion/extraction requirements. Double-ended test tabs are also available for electrical and temperature rise testing. AMP has readily available a variety of NEMA DC2 constructed tabs for mechanical testing of FASTON, Ultra-Fast and Positive Lock receptacles. These tabs are designed for electrical test setups as outlined in UL 310. (See instruction sheet IS-7432 for recommended procedure mechanical test)

FASTON Terminals—Loose Piece

FASTON Terminals Loose Piece

FASTON terminals have been designed for speed of application using selected terminating machines.

Receptacles 250 Series

Wire Range AWG	Loose Piece Part No.	Description
22-18	60878-2	Premier Receptacle
18-14	60705-1	Premier Receptacle
	60279-1	Piggyback Receptacle
	42238-2	FASTIN-FASTON
	42282-2	FASTIN-FASTON
	60419-2	"F" Crimp Flag
14-10	61227-1	Piggyback
12-10	60851-3	Hermetic Flag

Receptacles 187 Series

Wire Range AWG	Loose Piecel Part No.	Description
20-16	42566-2	Premier Receptacle
	42638-2	Premier (No Insulation)

250 Series Tabs

Wire Range AWG	Loose Piecel Part No.	Description
22-18	61316-1	FASTIN-FASTON
18-14	42565-2	FASTIN-FASTON
N/A	63067-1	P.C.B. Tabs

For Complete Product Information , Order Catalog 82004.

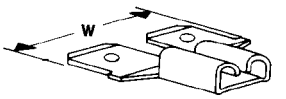
Standard Terminals and Splices

Terminals and Splices (Continued)

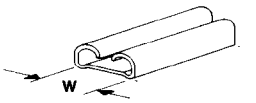
FASTON Tab Adapters

250 Series FASTON Tab Adapters

Fits Tab: .032



A



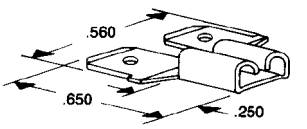
B

Style	Dual Thickness	Dim. W	Material and Finish	Terminal Part No.
A	**.018-.032** 0.46-0.81	**.650** 16.51	Brass	61765-1
			Tin Plated Brass	61765-2[1]
B	—	**.300** 7.62	Tin Plated Brass	61810-2

[1]No Tab stop on Receptacle.

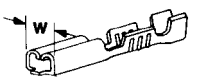
187 Series FASTON Tab Adapters

Fits Tab: .032



Stock Thickness	Material and Finish	Terminal Part No.
.013-.032 0.33-0.81	Tin Plated Brass	63699-1

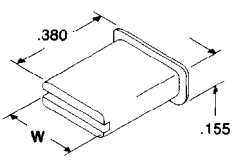
Tab Receptacles (Loose Piece)



Wire Range AWG	Wire Range mm²	Insul. Dia. Range	Stock Thickness	Material and Finish	Fits Tab	Dim. W	Terminal Part No.
24-20	0.2-0.6	**.040-.080** 1.02-2.03	**.010** 0.25	Tin Plated Brass	**.031 x .062** 0.79 x 1.57	**.090** 2.29	61454-1

Tab Caps and Splices

Tab Caps 250 Series



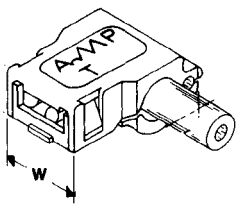
Tab Size	Material	UL 94[1]	Color	Dim. W	Part No.
.032 Thick 0.81	Nylon	V2	Natural	**.320** 8.13	360042-1

[1]Flammability rating.

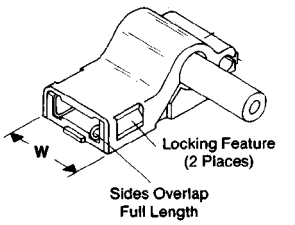
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information , Order Catalog 82004.

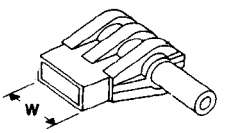
Terminals and Splices (Continued)



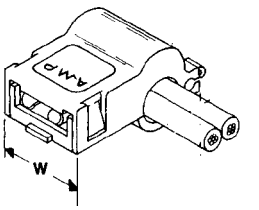
A
.250 Series



B
.250 Series



C
.250 Series



D
.187 Series

Style	Material	UL 94[1]	Color	Insulation Dia. Max.	Dim. W	Part No. Loose Piece
A	Nylon	V2	Natural	**.210** 5.33	**.448** 11.38	1-480307-1
B	Nylon	V2	Natural	**.140** or (2) **.110**	**.460** 11.68	1-480306-1
C	Vinyl	HB	Blue	**.150** 3.81	**.380** 9.65	480019-6
D	Nylon	V2	Natural	**.175** 4.44	**.430** 10.92	1-480487-2

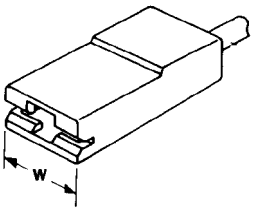
[1]Flammability rating of plastic material.

Standard Terminals and Splices

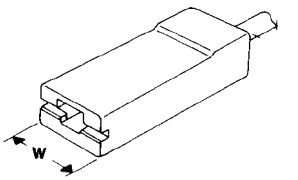
FASTON Housings

Straight Style Receptacle Housing

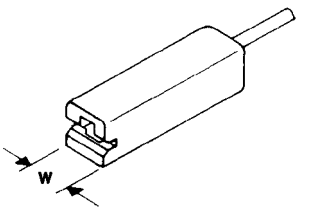
Terminals and Splices (Continued)



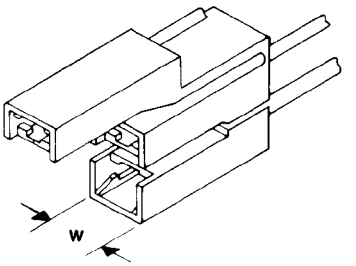
A
.250 Series



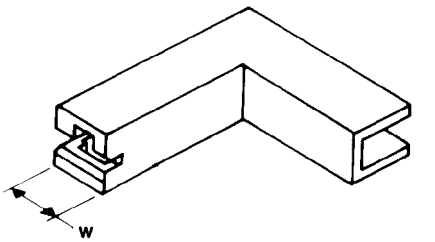
B
.205/.187 Series



C
.110 Series



D
.187 Series



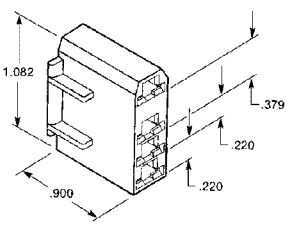
E
.110 Series

Style	Material	UL 94[1]	Color	Insulation Dia. Max.	Dim. W	Part No. Loose Piece
A	Nylon	V2	Natural	**.200** 5.08	**.390** 9.91	1-480416-0
			Black	**.200** 5.08	**.390** 9.91	1-480416-1
B	Nylon	V2	Natural	**.180** 4.57	**.338** 8.59	1-480418-0
			Natural	**.170** 4.32	**.308** 7.82	1-480435-0
C	Nylon	V2	Natural	**.150** 3.81	**.235** 5.97	1-480417-0
D	Nylon	V2	Natural	**.170** 4.32	**.317** 8.05	520212-1
			Red	**.170** 4.32	**.317** 8.05	520212-2
			Natural	**.170** 4.32	**.317** 8.05	360010-1
E	Nylon	V2	Natural	—	**.225** 5.71	360040-1

[1]Flammability rating of plastic material.

Defrost Timer Housing

4 Circuit
.250 Series
FASTON Housing



Material	UL 94[1]	Color	Part No.
Nylon	V2	Black	520987-1
		Natural	520987-2

[1]Flammability rating of plastic material.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information , Order Catalog 82004.

Standard Terminals and Splices

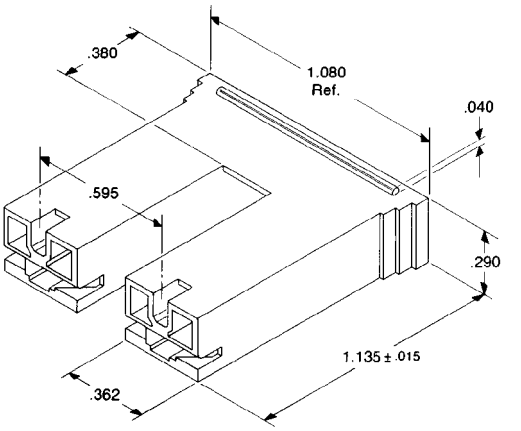
Terminals and Splices (Continued)

FASTON Housings

250 Series Housing

Water Valve Coil Connector

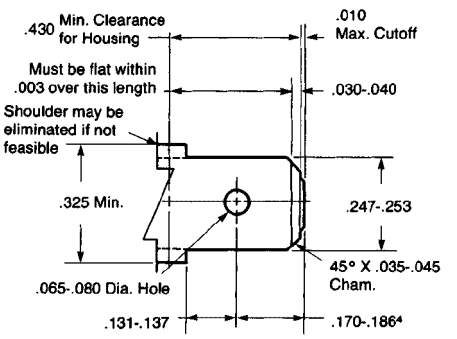
This connector is designed to mate with the Appliance Industry's Standard Water Valve Coil. The connector is suitable for such applications as washing machine mixing valves, dishwasher fill valves, and refrigerators with automatic ice makers. The housing has a unique internal cavity design to accomodate either two Positive Lock or two Budget and LIF FASTON receptacles.



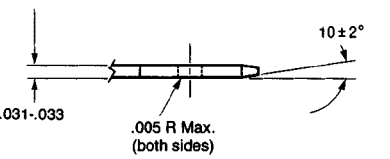
Material	UL 94[1]	Color	Part No.
Nylon	V2	Red	520935-2
		Black	520935-3[2]

[1]Flammability rating of plastic material.
[2]Weather resistant material.

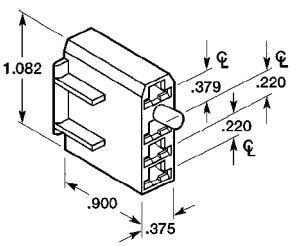
Recommended Mating Tab Dimensions



[4]Use when shoulder is eliminated.



Appliance Connectors



Material	UL 94[1]	Color	Part No.
Nylon	V2	Natural	521066-1

[1]Flammability rating of plastic material.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

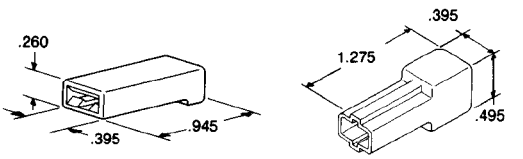
For Complete Product Information , Order Catalog 82004.

Standard Terminals and Splices

"250" Series FASTIN-FASTON Connectors

Single Circuit Connectors (Housings)

Terminals and Splices (Continued)

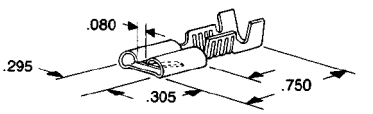


Material	UL 94[1]	Color	Part Numbers	
			Receptacle	Tab
Nylon	V2	Natural	480054-3	480053-3
		Black	480054-4	—

[1]Flammability rating.

Receptacles (For use with single circuit connectors)

Fits Tab: .032
Stock Thickness: .016
Mating Dimple

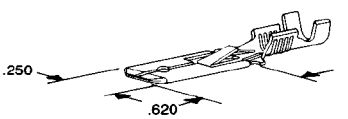


Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
18-14	**.120-.160** 3.05-4.06	Brass	42281-1
		Tin Plated Brass	42281-2
		Brass	60634-1[1]
16-12	**.160-.220** or (2) .130 Max.	Brass	60249-1[2]
		Tin Plated Brass	60249-2[2]

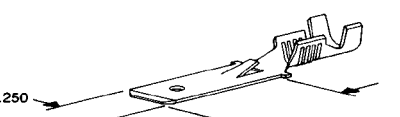
[1]No front slot.
[2]Also capable of accepting (2) 16 AWG wire.

Tabs (For use with single or multiple circuit connectors)

Stock Thickness: .015



A



B

Wire Range AWG	Style	Tab Thickness	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	A	**.032** 0.81	**.085-.125** 2.16-3.17	Tin Plated Brass	62553-3
18-14	A	**.032**	**.120-.160**	Brass	42460-1
		0.81	3.05-3.17	Tin Plated Brass	42460-2
	B	**.016** 0.41	**.120-.145** 3.05-3.68	Tin Plated Brass	42580-2[1]
14-10	A	**.032** 0.81	**.120-.170** 3.05-4.32	Tin Plated Brass	62553-3

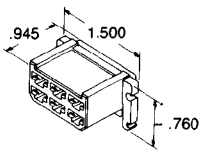
[1]Used for back-to-back with a combined thickness of .032.

Standard Terminals and Splices

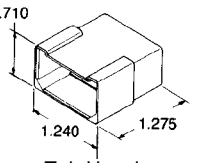
"250" Series
FASTIN—FASTON Connectors

Six Circuit Connectors (Housings)

Terminals and Splices (Continued)



Receptacle Housing



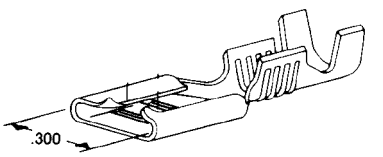
Tab Housing

Material	UL 94[1]	Color	Part Numbers	
			Receptacle	Tab
Nylon	V2	Natural	480003-5	480004-5

[1]Flammability rating.

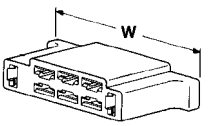
Receptacles (For use with multiple circuit connectors)

Fits Tab: .032
Stock Thickness: .012
Without **Mating Dimple**



Wire Range AWG	Insulation Diameter	Material and Finish	Terminal Part No.
22-18	**.085-.125** 2.16-3.17	Tin Plated Brass	60295-2
	.060-.100 1.52-2.54	Tin Plated Brass	60413-1
18-14	**.120-.160** 3.05-4.06	Brass	42100-1
		Tin Plated Brass	42100-2
12-16 or (2) 16	**.160-.210** or (2) .130 Max.	Tin Plated Brass	60253-2
12-10	**.135-.200** 3.43-5.08	Tin Plated Brass	180351-2

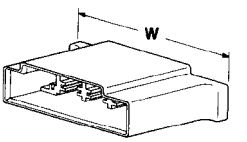
8-Circuit Connectors (Housings)



Mating Face

Material	UL 94[1]	Color	Dim. W	Housing No.
Nylon	V2	Natural	**2.125** 53.97	480173-1

[1]Flammability rating of plastic material.



Mating Face

Material	UL 94[1]	Color	Dim. W	Housing No.
Nylon	V2	Natural	**2.240** 56.90	480174-1

[1]Flammability rating of plastic material.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information , Order Catalog 82004.

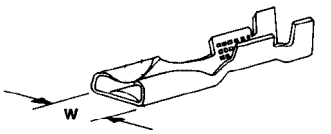
Standard Terminals and Splices

"187" Series
FASTIN—FASTON Connectors

Modular Connector Receptacles

Fits Tab: .016
Insulation Diameter: .090-.130 oe (2) .110 Max.

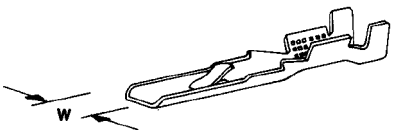
Terminals and Splices (Continued)



Wire Range AWG	Stock Thickness	Dim. W	Material and Finish	Terminal Part No.
20-16 or (2) 20	**.012** 0.30	**.220** 5.59	Pre-Tin Brass	60435-1

Modular Connector Tabs

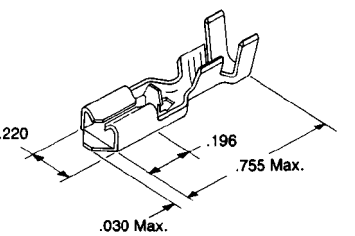
Tab Thickness: .016
Insulation Diameter: .090-.130 oe (2) .110 Max.



Wire Range AWG	Stock Thickness	Dim. W	Material and Finish	Terminal Part No.
20-16 or (2) 20	**.016** 0.41	**.145** 3.68	Pre-Tin Brass	60434-1

Positive Lock Receptacles

Mark II
187 Series Receptacles



Wire Range AWG	Insulation Diameter	Tab Size	Material and Finish	Part No.
20-16	**.090-.130** 2.29-3.30	**.020** 0.51	Brass/Pre-Tin	63232-1[1]

[1]Low profile—not for use in housing.

Standard Terminals and Splices

Ultra-Fast Fully Insulated FASTON Receptacles and Tabs

Receptacles

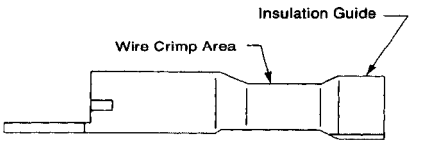
Material

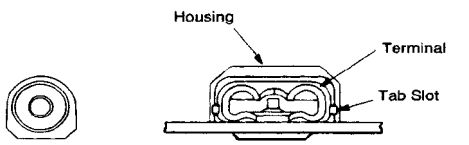
Housing—Nylon Type 6/6
Terminal—Tin-Plated, copper alloy

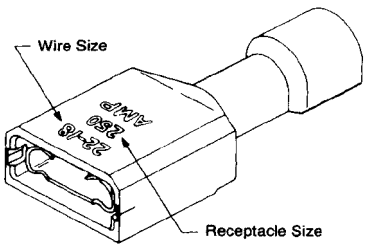
Color Code (Translucent)

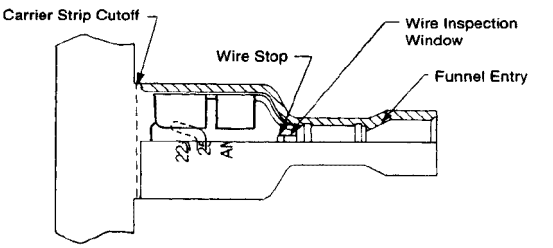
Violet—26-22 AWG
Red—22-18 AWG
Blue—16-14 AWG
Yellow—12-10 AWG

Terminals and Splices (Continued)









Description	Wire Range AWG	Ins. Dia. Max.	Mating Tab	Terminal Base Material	Part No. Strip	Part No. Loose Piece
.110/.125 Series	26-22	**.100** 2.54	**.020 x .110/.125** 0.51 x 2.79/3.17	Brass	7-520365-2[1]	7-520366-2[1]
	22-18	**.120** 3.05	**.016 x .110/.125** 0.41 x 2.79/3.17	Brass	2-520080-2[1]	2-520081-2[1]
			.020 x .110/.125 0.51 x 2.79/3.17	Brass	2-520083-2	2-520084-2
			.032 x .110/.125 0.81 x 2.79/3.17	Brass	2-520272-2	2-520273-2
		.230 5.84	**.020 x .110/.125** 0.51 x 2.79/3.17	Brass	2-520306-2[1]	—
			.032 x .110/.125 0.81 x 2.79/3.17	Brass	2-520310-2[1]	—
	16-14	**.260** 6.60	**.020 x .110/.125** 0.51 x 2.79/3.17	Brass	3-520370-2[2]	—
.187 Series	22-18	**.135** 3.43	**.020 x .187** 0.51 x 4.75	Brass	2-520181-2	2-520182-2
			.032 x .187 0.81 x 4.75	Brass	2-520193-2 2-521104-2	2-520194-2 2-521105-2
		.230 5.84	**.020 x .187** 0.51 x 4.75	Brass	2-520261-2	—
			.032 x .187 0.81 x 4.75	Brass	2-520274-2	2-520275-2
	16-14	**.160** 4.06	**.020 x .187** 0.51 x 4.75	Brass	3-350815-2	3-350816-2
			.032 x .187 0.81 x 4.75	Brass	3-520124-2	3-520125-2
		.260 6.60	**.020 x .187** 0.51 x 4.75	Brass	3-520150-2	3-520151-2

[1]UL Recognized, CSA Certified
[2]UL Recognized 8 AMPS Max. CSA Certified.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Standard Terminals and Splices

Ultra-Fast Fully Insulated FASTON Receptacles and Tabs

Receptacles

Terminals and Splices (Continued)

Description	Wire Range AWG	Ins. Dia. Max.	Mating Tab	Terminal Base Material	Part No.	
					Strip	Loose Piece
.250 Series	22-18	**.135** 3.43	**.032 x .250** 0.81 x 6.35	Brass	2-520183-2	2-520184-2
				Phos. Brz.	2-520183-4	2-520184-4
		.230 5.84	**.032 x .250** 0.81 x 6.35	Brass	2-520263-2	2-520264-2
				Phos. Brz.	2-520263-4	—
	16-14	**.160** 4.06	**.032 x .250** 0.81 x 6.35	Brass	3-350819-2	3-350820-2
				Phos. Brz.	3-520116-2	3-520117-2
		.260 6.60	**.032 x .250** 0.81 x 6.35	Brass	3-520140-2	3-520141-2
				Phos. Brz.	3-520140-4	—
	12-10	**.320** 8.13	**.032 x .250** 0.81 x 6.35	Brass	4-520447-2	4-520448-2

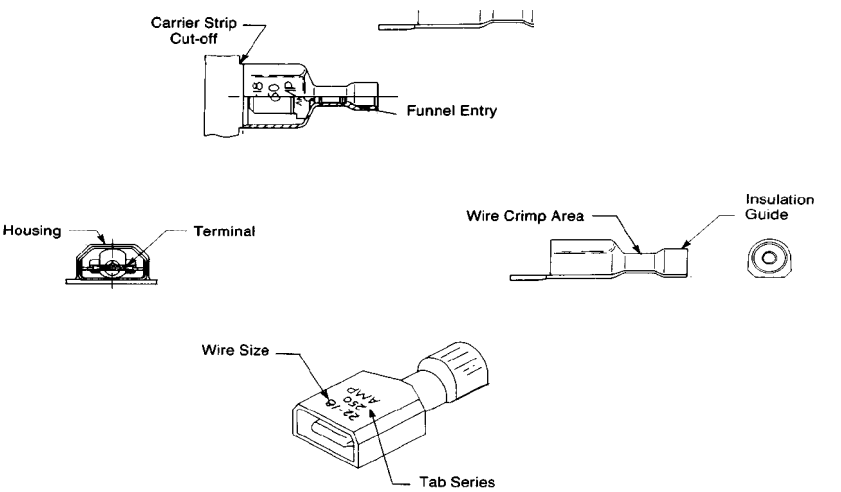
Ultra-Fast Fully Insulated FASTON Tabs

Material

Housing—Nylon Type 6/6
Terminal—Tin-Plated, copper alloy

Color Code (Translucent)

Red—22-18 AWG
Blue—16-14 AWG



Description	Wire Range AWG	Ins. Dia. Max.	Tab Size	Terminal Base Material	Part No.	
					Strip	Loose Piece
.250 Series	22-18	**.135** 3.43	**.032 x .250** 0.81 x 6.35	Brass	2-520102-2	2-520103-2
	16-14	**.160** 4.06	**.032 x .250** 0.81 x 6.35	Brass	3-520106-2	3-520107-2

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Standard Terminals and Splices

Ultra-Fast Fully Insulated FASTON Flag Receptacles

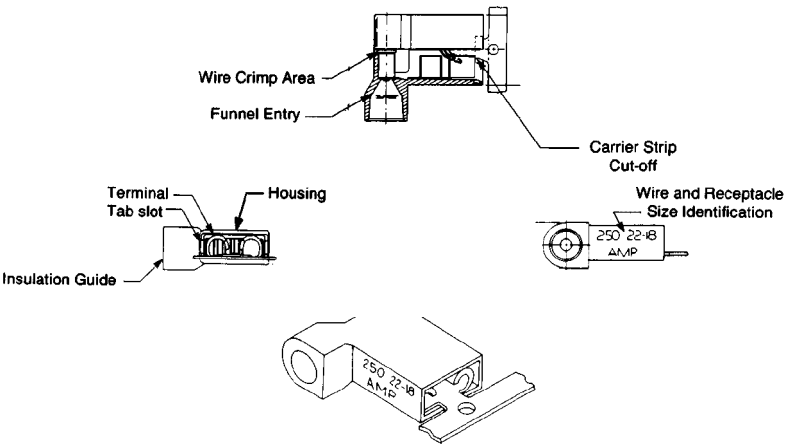
Material

Housing—Nylon Type 6/6
Terminal—Tin-Plated, copper alloy

Color Code (Translucent)

Red—22-18 AWG
Blue—16-14 AWG

Terminals and Splices (Continued)



Description	Wire Range[1] AWG	Ins. Dia. Max.	Mating Tab	Terminal Base Material	Part No.	
					Strip	Loose Piece
.187 Series	22-18	**.165** 4.19	**.020 x .187** 0.51 x 4.75	Brass	2-520334-2	2-520335-2
			.032 x .187 0.81 x 4.75	Brass	2-520336-2	2-520337-2
	16-14	**.185** 4.70	**.020 x .187** 0.51 x 4.75	Brass	3-520338-2	3-520339-2
			.032 x .187 0.81 x 4.75	Brass	3-520340-2	—
.250 Series	22-18	**.165** 4.19	**.032 x .250** 0.81 x 6.35	Brass	2-520128-2	2-520129-2
		.230 4.19	**.032 x .250** 0.81 x 6.35	Brass	2-520856-2	—
	16-14	**.185** 4.70	**.032 x .250** 0.81 x 6.35	Brass	3-520132-2	3-520133-2
		.260 6.60	**.032 x .250** 0.81 x 6.35	Brass	3-521013-2	—

[1]Stranded wire only.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Standard Terminals and Splices

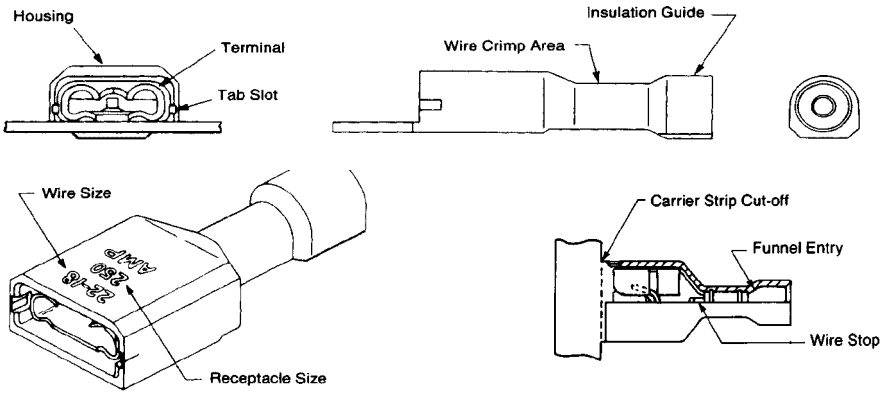
Ultra-Fast Plus—Fully Insulated FASTON Receptacles

Material

Housing—Nylon
Terminal—Tin-Plated, copper alloy

Color Code (Translucent)
Red—22-18 AWG
Blue—16-14 AWG

Terminals and Splices (Continued)



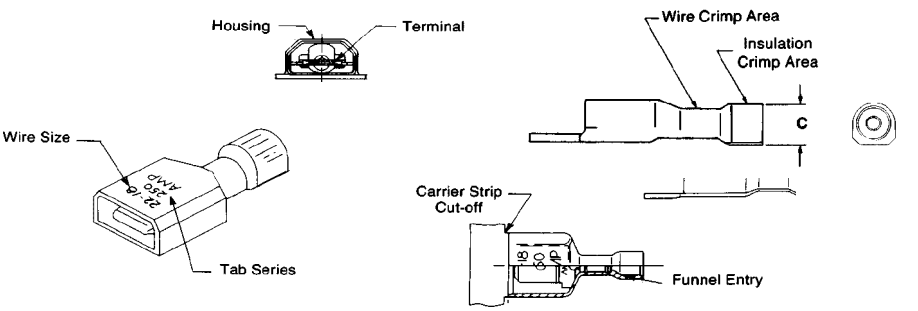
Description	Wire Range AWG	Ins. Dia. Range	Mating Tab	Terminal Base Material	Part No. Strip	Part No. Loose Piece
.110/.125 Series	22-18	**.060-.120** 1.52-3.05	**.032 x .110/.125** 0.81 x 2.79/3.17	Brass	2-520979-2	—
			.020 x .110/.125 0.51 x 2.79/3.17	Brass	2-520932-2	—
.187 Series	22-18	**.060-.135** 1.52-3.43	**.020 x .187** 0.51 x 4.75	Brass	2-520401-2	2-520409-2
			.032 x .187 0.81 x 4.75	Brass	3-520403-2	3-520411-2
	16-14	**.090-.160** 2.29-4.06	**.020 x .187** 0.51 x 4.75	Brass	2-520402-2	2-520410-2
			.032 x .187 0.81 x 4.75	Brass	3-520404-2	3-520412-2
.250 Series	22-18	**.060-.135** 1.52-3.43	**.032 x .250** 0.81 x 6.35	Brass	2-520405-2	2-520407-2
	16-14	**.090-.160** 2.29-4.06	**.032 x .250** 0.81 x 6.35	Brass	3-520406-2	3-520408-2

Ultra-Fast Plus—Fully Insulated FASTON Tabs

Material

Housing—Nylon Type 6/6
Terminal—Tin-Plated, copper alloy

Color Code (Translucent)
Red—22-18 AWG
Blue—16-14 AWG



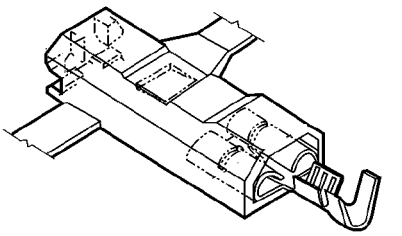
Description	Wire Range AWG	Ins. Dia. Range	Mating Tab	Terminal Base Material	Part No. Strip	Part No. Loose Piece
.250 Series	22-18	**.060-.135** 1.52-3.43	**.032 x .250** 0.81 x 6.35	Brass	2-521055-2	—
	16-14	**.090-.160** 2.29-4.06	**.032 x .250** 0.81 x 6.35	Brass	3-521057-2	—

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

For Complete Product Information , Order Catalog 82004.

Terminals and Splices (Continued)

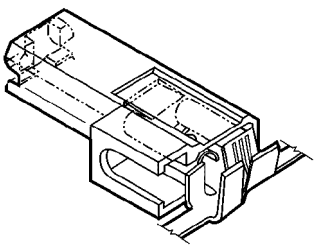
Insulation Support



Description	Wire Range AWG	Wire Range [mm²]	Ins. Dia. Range	Mating Tab	UL 94[1]	Color	Material and Finish	Part No.
.187 [4.75] Series	20-16	0.5-1.4	**.090-.130** 2.29-3.3	**.020 x .187** 0.51 x 4.75	V2	Natural	Brass	520973-1
				.032 x .187 0.81 x 4.75	V2	Natural	Brass	520982-1
.250 [6.35] Series	18-14	0.8-2	**.120-.170** 3.05-4.32	**0.32 x .250** 0.81 x 4.75	V2	Natural	Brass	520963-1
							Tin Plated Brass	520963-2
					V0	Natural	Tin Plated Brass	521046-1
					V2	Black	Tin Plated Brass	521011-2
	14-12	2-3	**.130-.180** 3.3-4.57	**0.32 x .250** 0.81 x 4.75	V2	Natural	Brass	520974-1
							Tin Plated Brass	520974-2

[1]Flammability rating of plastic material.

Flag Insulation Support



Description	Wire Range AWG	Wire Range [mm²]	Ins. Dia. Range	Mating Tab	UL 94[1]	Color	Material and Finish	Part No.
.250 [6.35] Series	18-14	0.8-2	**.110-.160** 2.79-4.06	**0.32 x .250** 0.81 x 4.75	V2	Natural	Brass	520971-1

[1]Flammability rating of plastic material.

Standard Terminals and Splices

PLASTI-GRIP Ring Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	4	**.218** 5.54	Red	**.140** 3.56	2-34141-1
		6 M3.5	**.218** 5.54	Red	**.125** 3.18	2-32945-1
			.281 7.14	Red	**.125** 3.18	2-32947-1
			.281 7.14	Red	**.140** 3.56	2-34144-1
			.281 7.14	Black	**.140** 3.56	2-326819-1
			.312 7.92	Red	**.125** 3.18	2-32950-1
			.312 7.92	Red	**.140** 3.56	2-34147-1
		8 M4	**.281** 7.14	Red	**.125** 3.18	2-32948-1
			.281 7.14	Red	**.140** 3.56	2-34145-1
			.312 7.92	Red	**.125** 3.18	2-32951-1
			.312 7.92	Red	**.140** 3.56	2-34148-1
			.312 7.92	Red	**.200** 5.08	2-34148-4
		10	**.281** 7.14	Red	**.125** 3.18	2-32949-1
			.281 7.14	Red	**.140** 3.56	2-34146-1
			.312 7.92	Red	**.125** 3.18	2-32952-1
		1/4 M6	**.469** 11.91	Red	**.125** 3.18	2-32953-1
			.469 11.91	Red	**.140** 3.56	2-34150-1
		5/16 M8	**.469** 11.91	Red	**.140** 3.56	2-34151-1
		3/8	**.531** 13.49	Red	**.140** 3.56	2-34152-2
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.343** 8.71	Blue	**.145** 3.68	2-32958-1
			.343 8.71	Blue	**.170** 4.32	2-34159-1
		8 M4	**.312** 7.92	Blue	**.170** 4.32	2-328527-1
			.343 8.71	Blue	**.145** 3.68	2-32959-1
			.343 8.71	Blue	**.170** 4.32	2-34160-1
		10	**.343** 8.71	Blue	**.145** 3.68	2-32960-1
			.343 8.71	Blue	**.170** 4.32	2-34161-1
		1/4 M6	**.469** 11.91	Blue	**.170** 4.32	2-34162-1
		5/16 M8	**.469** 11.91	Blue	**.170** 4.32	2-34163-1
		3/8	**.531** 13.49	Blue	**.170** 4.32	2-34164-2

Style A

For Complete Product Information , Order Catalog 82042.

Standard Terminals and Splices

PLASTI-GRIP Ring Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
16-14HD[1] 2,050-5,180 [1.04-2.62]		10	**.343** 8.71	Yellow/Blk	**.200** 5.08	2-34823-1[2]
			.343 8.71	Yellow/Blk	**.250** 6.35	2-321518-1
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.281** 7.14	Yellow	**.250** 6.35	2-34852-1
			.375 9.53	Yellow	**.230** 5.84	2-34168-1
		8 M4	**.375** 9.53	Yellow	**.230** 5.84	2-34169-1
			.375 9.53	Yellow	**.250** 6.35	2-34853-1
		10	**.312** 7.92	Yellow	**.300** 7.62	1-330518-2
			.375 9.53	Yellow	**.250** 6.35	2-328261-1
			.375 9.53	Yellow	**.230** 5.84	2-34170-1
			.375 9.53	Yellow	**.250** 6.35	2-34854-1
		1/4 M6	**.531** 13.49	Yellow	**.230** 5.84	2-34171-1
			.531 13.49	Yellow	**.250** 6.35	2-34855-1
		5/16 M8	**.531** 13.49	Yellow	**.230** 5.84	2-34172-1
			.531 13.49	Yellow	**.250** 6.35	2-34856-1
		3/8	**.593** 15.06	Yellow	**.230** 5.84	2-34173-1
		1/2 M2	**.750** 19.05	Yellow	**.250** 6.35	2-34837-4

Style A

[1]Heavy Duty for extra mechanical strength.
[2]Not UL or CSA Approved or Listed.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

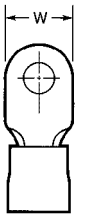
Standard Terminals and Splices

PLASTI-GRIP Ring Tongue Terminals

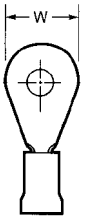
Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

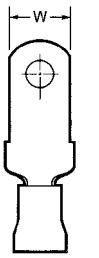
Terminals and Splices (Continued)



Style B



Style C



Style F

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
							Loose Piece	Tape Mounted
8 13,100-20,800 [6.64-10.5]	**.043** 1.09	8 M4	C	**.478** 12.14	Red	**.360** 9.14	—	52041-6
		10	B	**.431** 10.95	Red	**.360** 9.14	—	52263-2
				.431 10.95	Red	**.330** 8.38	52263-1	52263-3
		1/4 M6	C	**.431** 10.95	Red	**.360** 9.14	—	55621-2
				.478 12.14	Red	**.360** 9.14	52041-1	52041-7
				.478 12.14	Red	**.330** 8.38	52041-3[1]	52041-9
		5/16 M8	C	**.587** 14.91	Red	**.360** 9.14	—	52291-4
		3/8	C	**.587** 14.91	Red	**.360** 9.14	52291-1[1]	—
		1/2 M12	A	**.875** 22.23	Red	**.330** 8.38	52262-1	—
6 20,800-33,100 [10.5-16.8]	**.048** 1.22	8 M4	C	**.500** 12.70	Blue	**.360** 9.14	52042-2	—
		10	B	**.468** 11.89	Blue	**.436** 11.07	—	52265-3
			C	**.500** 12.70	Blue	**.436** 11.07	52042-4	—
		1/4 M6	F	**.398** 10.11	Blue	**.450** 11.43	—	55679-2
			C	**.500** 12.70	Blue	**.436** 11.07	52042-1	52042-7
				.500 12.70	Blue	**.360** 9.14	52042-3[1]	52042-9
		3/8	B	**.625** 15.88	Blue	**.450** 11.43	52264-1[1]	—

[1]Available in small packaging quantities.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Standard Terminals and Splices

PLASTI-GRIP Ring Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Style B

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Style	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
							Loose Piece	Tape Mounted
4 33,100-52,600 [16.8-26.7]	**.051** 1.30	10	B	**.546** 13.87	Yellow	**.450** 11.43	52043-2	—
		1/4 M6	B	**.391** 9.93	Yellow	**.450** 11.43	—	55680-2
				.546 13.87	Yellow	**.450** 11.43	52043-3[1]	—
				.546 13.87	Yellow	**.515** 13.08	52043-1	—
		5/16 M8	B	**.679** 17.25	Yellow	**.450** 11.43	52266-3	—
		3/8	B	**.679** 17.25	Yellow	**.450** 11.43	52266-4[1]	—
2 52,600-83,700 [26.7-42.4]	**.060** 1.52	1/4 M6	B	**.675** 17.15	Red	**.560** 14.22	52267-1	—
		5/16 M8	B	**.711** 18.06	Red	**.632** 16.05	52044-1	—
		3/8	B	**.711** 18.06	Red	**.632** 16.05	52044-2	—
1/0 83,700-119,500 [42.4-60.6]	**.060** 1.52	5/16 M8	B	**.807** 20.50	Blue	**.684** 17.37	52045-1	—
		3/8	B	**.807** 20.50	Blue	**.665** 16.89	52045-5	—

[1]Available in small packaging quantities.

Standard Terminals and Splices

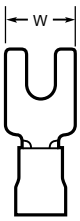
Terminals and Splices (Continued)

PLASTI-GRIP Spade Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6 M3.5	**.250** 6.35	Red	**.140** 3.56	2-327043-1
			.297 7.54	Red	**.125** 3.18	2-327735-1
			.297 7.54	Red	**.140** 3.56	2-320665-1
		8 M4	**.375** 9.53	Red	**.125** 3.18	2-32981-1
			.375 9.53	Red	**.140** 3.56	2-34155-1
		10	**.375** 9.53	Red	**.140** 3.56	2-34156-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.297** 7.54	Blue	**.145** 3.68	2-322994-1
		10	**.385** 9.78	Blue	**.170** 4.32	2-34167-1
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	10	**.406** 10.31	Yellow	**.230** 5.84	2-34176-1



PLASTI-GRIP Flanged Spade Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Loose Piece	Part Numbers Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6 M3.5	**.296** 7.52	Red	**.140** 3.56	—	1-322249-1
		8 M4	**.296** 7.52	Red	**.140** 3.56	1-322249-0	1-322249-9
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.294** 7.47	Blue	**.170** 4.32	—	2-324165-1
		8 M4	**.294** 7.47	Blue	**.170** 4.32	—	53874-2
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.296** 7.52	Yellow	**.230** 5.84	—	1-324581-1
		10	**.416** 10.57	Yellow	**.250** 6.35	—	52856-1

Standard Terminals and Splices

Terminals and Splices (Continued)

PLASTI-GRIP Short Spring Spade Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Phosphor bronze per ASTM B-139 for wire sizes 22-14, brass per ASTM B-36 for wire sizes 12-10, tin plated per MIL-T-10727

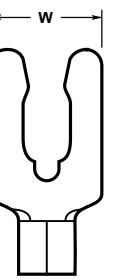
Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers	
						Loose Piece	Tape Mounted
22-16 509-3,260 [0.26-1.65]	**0.33** 0.84	4	**.203** 5.16	Red	**.140** 3.56	—	52947-1
		6 M3.5	**.234** 5.94	Red	**.140** 3.56	53240-1[1]	53240-2
			.250 6.35	Red	**.140** 3.56	—	52949-1
			.250 6.35	Red	**.200** 5.08	—	52949-3
		8 M4	**.244** 6.20	Red	**.140** 3.56	53241-1	53241-2
			.375 9.53	Red	**.140** 3.56	—	52950-1
		10	**.294** 7.47	Red	**.140** 3.56	53242-1	53242-2
			.406 10.31	Red	**.140** 3.56	—	52951-1
			.406 10.31	Red	**.200** 5.08	—	52951-3
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.250** 6.35	Blue	**.170** 4.32	—	52955-1
			.250 6.35	Blue	**.250** 6.35	52955-2	52955-3
		8 M4	**.244** 6.20	Blue	**.170** 4.32	53244-1[1]	53244-2
			.375 9.53	Blue	**.170** 4.32	—	52956-1
		10	**.294** 7.47	Blue	**.170** 4.32	53245-1	—
			.406 10.31	Blue	**.170** 4.32	—	52957-1
			.406 10.31	Blue	**.250** 6.35	—	52957-3
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	10	**.406** 10.31	Yellow	**.300** 7.62	—	52963-5

[1]Available in small packaging quantities.

PLASTI-GRIP Long Spring Spade Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Phosphor bronze per ASTM B-139 for wire sizes 22-14, brass per ASTM B-36 for wire sizes 12-10, tin plated per MIL-T-10727



Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers
						Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6 M3.5	**.250** 6.35	Red	**.140** 3.56	52453-1
		8 M4	**.281** 7.14	Red	**.140** 3.56	52454-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.250** 6.35	Blue	**.170** 7.01	52463-1
		8 M4	**.281** 7.14	Blue	**.170** 7.01	52464-1

Standard Terminals and Splices

Terminals and Splices (Continued)

PLASTI-GRIP Multiple Stud Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6-8-10	**.325** 8.26	Red	**.125** 3.18	54774-2

PLASTI-GRIP Butt Splices

Material and Finish:

Insulation—Vinyl
Splice Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils[1] [mm²]	Splice Insulation Color	Wire Insulation Diameter Max.	Part Numbers Loose Piece	Part Numbers Tape Mounted
22-16[2] 509-3,260 [0.26-1.65][2]	Red	**.120** 3.05	—	2-34067-1
		.170 4.32	—	1-34243-1
		.140 3.56	—	1-34070-1
16-14 2,050-5,180 [1.04-2.62]	Blue	**.170** 4.32	—	2-34071-1
	Natural w/ Blue Letters	**.170** 4.32	55785-1[3]	—
	Blue	**.170** 4.32	—	2-34071-3[4]
12-10 5,180-13,100 [2.62-6.64]	Yellow	**.230** 5.84	—	2-34072-2

[1]When using two or more wires in either end of a butt splice, the combined cross sectional area must be within the circular mil area (CMA) range listed.
[2]22-16 splices are 22-18 range in accordance with MIL-T-7928.
[3]Available in small packaging quantities.
[4]Funnel entry.

AMPLI-BOND Ring Tongue Terminals

Material and Finish:

Insulation—Vinyl
Splice Body—Copper per ASTM B-152, tin plated per MIL-T-10727
Insulation Support Ring—Steel per ASTM A-109

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
8 13,100-20,800 [6.64-10.5]	**.043** 1.09	10	**.431** 10.95	Red	**.298** 7.57	2-322128-2

PLASTI-BOND Ring Tongue Terminals

Material and Finish:

Insulation—Vinyl
Terminal Body and Metallic Sleeve—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Tongue Material Thickness Max.	Stud Size	Dim. W	Terminal Insulation Color	Wire Insulation Diameter Max.	Part Numbers Tape Mounted
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	1/4 M6	**.500** 12.70	Black	**.300** 7.62	2-35627-1

For Complete Product Information , Order Catalog 82042.

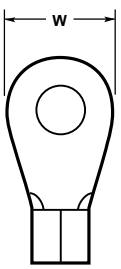
SOLISTRAND and Budget Terminals and Splices

Ring Tongue Terminals

Material and Finish:

Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Style A



Style C

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Style	Dim. W	Wire Barrel I.D. Min.		Part Numbers	
					SOLISTRAND	Budget	SOLISTRAND	Budget
26-22 202-810 [0.1-0.41]	**.020** 0.51	2 M2	A	**.140** 3.56	—	**.035** 0.89	—	2-31425-2
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	4	A	**.218** 5.54	**.061** 1.55	—	2-34104-6	—
			A	**.250** 6.35	**.061** 1.55	—	2-323096-2	—
		6 M3.5	A	**.218** 5.54	**.061** 1.55	—	2-34105-2	—
			A	**.281** 7.14	**.061** 1.55	—	2-34107-2	—
		8 M4	A	**.312** 7.92	**.061** 1.55	—	2-34111-3	—
			A	**.281** 7.14	**.061** 1.55	—	2-34108-2	—
		10	A	**.312** 7.92	**.061** 1.55	—	2-34112-2	—
			A	**.574** 14.58	**.061** 1.55	—	2-34109-2	—
		1/4 M6	A	**.469** 11.91	**.061** 1.55	—	2-34113-2	—
		5/16 M8	A	**.469** 11.91	**.061** 1.55	—	2-34114-2	—
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	A	**.250** 6.35	**.085** 2.16	—	2-34120-1	—
			A	**.312** 7.92	**.085** 2.16	—	2-321684-1	—
		8 M4	A	**.343** 8.71	**.085** 2.16	—	2-34122-1	—
			A	**.312** 7.92	**.085** 2.16	—	2-324955-1	—
		10	A	**.343** 8.71	**.085** 2.16	—	2-34123-1	—
			A	**.312** 7.92	**.085** 2.16	—	2-320093-1	—
		1/4 M6	A	**.469** 11.91	**.085** 2.16	—	2-34124-1	—
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	A	**.281** 7.14	**.129** 3.28	—	2-35476-1	—
			A	**.375** 9.53	**.129** 3.28	—	2-33456-1	—
		8 M4	A	**.375** 9.53	**.129** 3.28	—	2-32994-1	—
		10	A	**.375** 9.53	**.129** 3.28	—	2-33457-2	—
			A	**.500** 12.70	**.129** 3.28	—	2-35771-1	—
		1/4 M6	A	**.531** 13.49	**.129** 3.28	—	2-33458-3	—
		5/16 M8	A	**.531** 13.49	**.129** 3.28	—	2-22459-6	—
		3/8	A	**.593** 15.06	**.129** 3.28	—	1-33220-2[4]	—
		1	A	**1.250** 31.75	**.129** 3.28	—	1-320765-0	—

[4]Requires a 68250-1 Heavy Duty TAPETRONIC and 68242-2 die set for application.

SOLISTRAND and Budget Terminals and Splices

Ring Tongue Terminals

Material and Finish:

Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Style	Dim. W	Wire Barrel I.D. Min.		Part Numbers	
					SOLISTRAND	Budget	SOLISTRAND	Budget
8 13,100-20,800 [6.64-10.5]	**.051** 1.30	10	C	**.406** 10.31	**.172** 4.37	—	2-33460-2[1,3]	—
			C	**.406** 10.31	**.172** 4.37	—	2-31807-2[2,3]	—
		1/4 M6	C	**.469** 11.91	**.172** 4.37	—	2-33461-2[1,3] 2-33461-3[2,3]	—
6 20,800-33,100 [10.5-16.8]	**.060** 1.52	10	C	**.625** 15.88	**.232** 5.89	—	53106-1	—
		1/4 M6	C	**.625** 15.88	**.232** 5.89	—	2-33465-1	—
			C	**.468** 11.89	**.232** 5.89	—	2-321598-3	—
		5/16 M8	C	**.625** 15.88	**.232** 5.89	—	2-33466-3	—
		3/8	C	**.625** 15.88	**.232** 5.89	—	2-33467-3	—

[1]Requires a 69875 standard TAPETRONIC machine for application.
[2]Requires a 68250-1 Heavy Duty TAPETRONIC machine for application.
[3]Part numbers are available in small quantity packages.

SOLISTRAND Heavy Duty Ring Tongue Terminals

Material and Finish:

Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Style	Dim. W	Wire Barrel I.D. Min.	Part Numbers
16-14 2,050-5,180 [1.04-2.62]	**.050** 1.27	10	A	**.343** 8.71	**.105** 2.67	2-34567-1

Style A

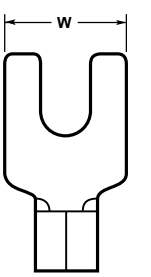
SOLISTRAND Spade Tongue Terminals

Material and Finish:

Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Dim. W	Wire Barrel I.D. Min.	Part Numbers
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	2 M2	**.182** 4.62	**.061** 1.55	53555-1[1]
		6 M3.5	**.297** 7.54	**.061** 1.55	2-36195-3
		10	**.375** 9.53	**.061** 1.55	2-34118-2

[1]Available in small packaging quantities.



SOLISTRAND Terminals and Splices

Terminals and Splices (Continued)

Short Spring Spade Tongue Terminals

Material and Finish:

Terminal Body—Phosphor Bronze per ASTM B-103, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Dim. W	Wire Barrel I.D. Min.	Part Numbers
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6 M3.5	**.250** 6.35	**.061** 1.55	53120-1[1] 53120-2
		8 M4	**.244** 6.20	**.061** 1.55	53831-1[1] 53831-2
		10	**.294** 7.47	**.061** 1.55	53832-2
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	6 M3.5	**.250** 6.35	**.085** 2.16	53123-1[1] 53123-2
		8 M4	**.375** 9.53	**.085** 2.16	53124-1[1] 53124-2
			.244 6.20	**.085** 2.16	53833-2
		10	**.406** 10.31	**.085** 2.16	53125-1[1] 53125-2
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	6 M3.5	**.250** 6.35	**.129** 3.28	53126-1[1] 53126-2
		8 M4	**.375** 9.53	**.129** 3.28	53127-1[1]
			.312 7.92	**.129** 3.28	53835-2
		10	**.406** 10.31	**.129** 3.28	53128-1[1] 53128-2
			.312 7.92	**.129** 3.28	53836-2

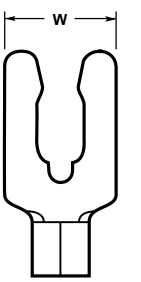
[1]Available in small packaging quantities.

Long Spring Spade Tongue Terminals

Material and Finish:

Terminal Body—Phosphor Bronze per ASTM B-103, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Dim. W	Wire Barrel I.D. Min.	Part Numbers
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	10	**.375** 9.53	**.129** 3.28	52717-2

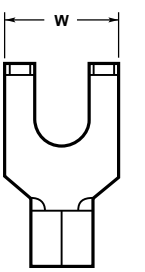


Flanged Spade Tongue Terminals

Material and Finish:

Terminal Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Wire Size Circular Mils [mm²]	Material Thickness Max.	Stud Size	Dim. W	Wire Barrel I.D. Min.	Part Numbers
22-16 509-3,260 [0.26-1.65]	**.033** 0.84	6 M3.5	**.296** 7.52	**.061** 1.55	2-320749-2
		8 M4	**.296** 7.52	**.061** 1.55	52730-1
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	8 M4	**.294** 7.47	**.085** 2.16	2-320856-1
12-10 5,180-13,100 [2.62-6.64]	**.042** 1.07	10	**.416** 10.57	**.129** 3.28	2-323144-1



SOLISTRAND Terminals and Splices

Butt Splices

Material and Finish:

Splice Body—Copper per ASTM B-152, tin plated per MIL-T-10727

Terminals and Splices (Continued)

Wire Size Circular Mils [mm²]	Material Thickness Max.	Style	Dim. L	I.D. Min.	O.D. Max.	Part Numbers
16-14 2,050-5,180 [1.04-2.62]	**.033** 0.84	Standard	**.567** 14.40	**.085** 2.16	**.165** 4.19	2-31819-1

Standard

For Complete Product Information , Order Catalog 65505.

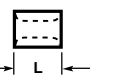
STRATO-THERM Terminals and Splices

SOLISTRAND Heat Resistant Splices

Material and Finish:

Splice Body—Copper per ASTM B-152, Nickel plated per QQ-N-290, 650°F [343°C]

Wire Size Circular Mils [mm²]	Material Thickness Max.	Style	Dimensions L Max.	Dimensions ID Min.	Dimensions OD Max.	Part Numbers Loose Piece
8 13,100-20,800 [6.64-10.5]	**.051** 1.30	B	**.375** 9.53	**.172** 4.37	**.296** 7.52	2-34318-1



Style-B Non-Insulation Support Parallel Splice

For Complete Product Information , Order Catalog 82011.

Closed End Splices

Terminals and Splices (Continued)

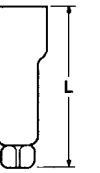
Vinyl BOMB-TAIL Splices —VS, ECV*

Material and Finish:

Insulation—Vinyl
Splice Body—Copper, except where noted (see chart), tin plated

***Splice Marking:**
VS—300V, 90°C
ECV—600V max. Building Wire —1,000V max. Fixtures and Signs, 105°C (UL), 90°C (CSA)

Wire Size [mm²] Circular Mils	Splice Insulation Color	Dim. L Max.	Splice Marking* (Voltage & Temp. Rating Code)	Part Numbers	
				Loose Piece	Tape Mounted
22-16 [0.3-1.4] 3,248-4,872	Transparent	**.825** 20.96	ECV	—	1-330021-0[1]
22-14 [0.3-2.0] 509-5,180	Purple	**.740** 18.80	VS	—	2-36964-2
	Purple	**.775** 19.69	VS	2-328375-3	—
	Purple	**.900** 22.96	ECV	55843-1	—
22-12 [0.3-3.0] 3,248-11,400	Transparent	**1.500** 34.10	ECV	53234-1[2]	—
22-10 [0.3-6.0] 3,248-13,100	Purple	**1.010** 25.65	VS	—	1-36965-1
18-6 [0.8-16] 19,500-42,700	Blue	**1.600** 40.64	ECV	53891-1	—



[1]Splice body material is steel.
[2]Bulk package.

Nylon Molded Splices —ECN, EC*

Material and Finish:

Insulation—Nylon
Splice Body—Copper, tin plated

***Splice Marking:**
ECN—300V, 105°C
EC—600V max. Building Wire —1,000V max. Fixtures and Signs, 105°C

Wire Size [mm²] Circular Mils	Splice Insulation Color	Dim. L Max.	Splice Marking* (Voltage & Temp. Rating Code)	Part Numbers	
				Loose Piece	Tape Mounted
22-14 [0.3-2.0] 509-5,180	Transparent	**.680** 17.27	ECN	—	1-35115-0
22-10 [0.3-6.0] 3,248-13,100	Transparent	**.775** 19.69	ECN	—	2-35653-1
	Transparent	**.970** 24.64	EC	53915-1	53915-2
	Transparent	**.720** 18.29	EC	—	2-328730-1

AMPOWER Terminals and Splices

AMPOWER Terminals

Base Material:

Annealed Copper
(ASTM B-188)

Electrodeposited Tin Plate
(MIL-T-10727)

Terminals and Splices (Continued)

B

F[1]

I[1]

Wire Size	Wire Range	Barrel I.D. Min.	Tongue Thickness Max.	Style	Stud Size	Dimension W Max.	Part Number
300 MCM 152 mm²	275-325 MCM	**.758** 19.25	**.16** 4.06	B	3/8 —	**1.40** 35.56	325803-1[2]
500 MCM 253 mm²	450-550 MCM	**.981** 24.92	**.20** 5.08	I	1/2 M12	**1.80** 45.72	53642-2
600[3] MCM 304 mm²	550-650 MCM	**1.075** 27.31	**.22** 5.59	F	3/8 —	**1.95** 49.53	326809[2]

[1]Per NEMA Specifications.
[2]No sight hole.
[3]Two crimps necessary.

For Complete Product Information , Order Catalog 82025.

Special Terminals Slotted Stud Hole

Wire Size Range:

400 to 500 MCM
[203 to 253 mm²]

Wire Size	Wire Range	Stud Size	Barrel I.D. Min.	Tongue Thickness Max.	Dim. W Max.	Part Number
400 MCM	375-450 MCM	3/8 —	**.876** 22.25	**.18** 4.57	**1.61** 40.89	276963-1
500 MCM	450-550 MCM	3/8 —	**.981** 24.92	**.20** 5.08	**1.80** 45.72	276964-1

For Complete Product Information, Order Catalog 82025.

AMP-SIMEL Connectors Crimp Lugs for Braided Cable

Cable Size mm²	Stud Size	Part Number
16	**.327** 8.3	710026-5
25	**.327** 8.3	710027-2

For Complete Product Information, Order Catalog 889143.

Table of Contents Click Below

Section Ten: RF Connectors

RF Connectors (Continued)

Connector Types

BNC connectors offer easy engagement and disengagement using bayonet couplings and overlapping dielectrics. They are most useful for frequently coupled and uncoupled RF connections with frequencies below 4 GHz. BNC connectors find applications in flexible networks, instrumentation, and computer peripheral interconnections.

TNC connectors have an interface similar to BNC except for a threaded coupling nut. The tighter fit provided by this screw-on connection improves interface control allowing connectors to operate up to 11 GHz. TNC connectors are excellent for mobile units or aircraft where top-notch performance is required under vibration.

SMB connectors feature a snap coupling for fast connection. A self centering outer spring and overlapping dielectric allows easy snap-on and excellent performance even in moderate vibration. The SMB is smaller in size than the SMA and excellent where engineers are concerned about circuit miniaturization. Typical application is inter- or intra-board connection of RF or digital signals. Commercial 50 ohm versions operate to 4 GHz, and 75 ohm versions reach 2 GHz.

SMA threaded connectors are widely used in avionics, radar and microwave communications and instrumentation. Connectors operate to at least 12.4 GHz on flexible coax cables, and up to 26.5 GHz on semi-rigid coax cables. Crimp-on SMA connectors that operate to 26.5 GHz are available.

UHF connectors are relatively inexpensive screw-on products. They have large impedance discontinuities that limit their range to about 500 MHz. Miniature versions, however, offer 2 GHz bandwidth. These products are used extensively in commercial communications and instrument applications.

N threaded connectors have an air dielectric interface, are low cost and are available in 50 and 75 ohm impedance types. These connectors operate to 11 GHz and are commonly used in cable-based local-area networks (LAN's) medium power transmitters and test equipment.

Note: Other RF Connector families are available. For more information contact AMP Incorporated at 1-800-522-6752.

Cable-to-Connector Selection Guide

RF Connectors (Continued)

RF Coaxial Cable Groups

In the product section of this catalog the connector selection charts are arranged by cable range groups, indicated by a Selection Code. Various types and styles of connectors are listed for a particular code, showing all the options for that cable range.

The following Cable-to-Connector Selection Guide has been organized for the convenience of a customer trying to find connectors that match a specific coaxial cable. This guide will assist in identifying the selection code when the RG type or manufacturers' part number is known.

Connector Cable Range Selection Code	Dielectric Core Size		Center Conductor O.D.		Nominal Impedance (ohms)	Number of Shields	RG Cable Numbers	Nom. Jacket O.D.		Cable Manufacturer
	inch	[mm]	inch	[mm]				inch	[mm]	
A	.034/.036	0.86/0.91	.012	0.3	50	1	178, 178A, 178B	.072	1.83	—
	.034	0.86	.012	0.3	50	1	196, 196A	.072	1.83	—
B	.060	1.52	.019	0.51	50	1	174,174A	.100	2.54	—
	.060	1.52	.020	0.51	50	1	316, 188, 188A	.102/.105	2.60/2.67	—
B1	.057/.063	1.4/1.6	.012	0.3	75	1	179, 179A, 179B	.100	2.54	—
	.057	1.45	.012	0.3	70	1	161	.082	2.08	—
	.060	1.52	.012	0.3	75	1	187, 187A	.105	2.67	—
	.058	1.47	.012	0.3	75	1	—	.097	2.46	Belden 9221
B2	.072	1.83	.011	0.28	—	1	—	.115	2.92	IBM 5353914, Brand Rex T-209A
B3	.060	1.52	.020	0.51	50	2	—	.114	2.90	RD 316, 188 Double Braid
B4	.078	1.98	.016	0.41	75	2	—	.123	3.12	AT&T 735A
B5	.063	1.60	.012	0.30	75	2	—	.121	3.07	AT&T KS 19224 L2, RD179
C	0.96	2.44	.030	0.76	50	1	122	.160	4.06	—
C1	.102/.103	2.59/2.62	.012	0.3	95	1	180, 180A, 180B	.140	3.56	—
	.102	2.59	.012	0.3	95	1	195, 195A	.145	3.69	—
C2	.102	2.59	.037	0.94	50	1	—	.198	5.03	Belden 8219
	.102	2.59	.037	0.94	50	1	—	.185	4.70	Belden 9907
	.095	2.41	.037	0.94	50	1	—	.165	4.19	Belden 89907
	.101	2.57	.037	0.94	50	1	—	.184	4.67	Comm/Scope 3104
	.101	2.57	.037	0.94	50	1	—	.166	4.22	Comm/Scope 2104
C3	.100	2.54	.017	0.43	75	1	—	.150	3.81	Belden 8218
C4	.110	2.79	.025	0.64	—	1	58, 58A, 58B, 58C	.156	3.96	Raychem 7524A1312
D	.116	2.95	.032/.035	0.81/0.89	50	1	—	.195	4.96	—
D1	.116	2.95	.036/.039	0.92/0.99	50	1	141, 141A	.190	4.83	—
	.116	2.95	.039	0.99	50	1	303	.170	4.32	—
D2	.107	2.72	.032	0.81	50	1	—	.159	4.04	Belden 88240, Berk-Tek BTDC-58
	.116	2.95	.037	0.94	50	1	—	.174	4.42	Comm/Scope 2135
E	.116	2.95	.035	0.89	50	2	223	.211	5.36	—
	.116	2.95	.032/.035	0.81/0.89	50	2	55, 55A, 55B	.200	5.08	—
E1[1]	.116	2.95	.036/.039	0.92/0.99	50	2	142, 142A, 142B, 400	.195	4.96	—
G	.135	3.43	.025	0.64	73	1	124 (use RG-140)	.240	6.10	—
	.146	3.71	.022	0.56	75	1	—	.220	5.59	Belden 9291, 9209
	.146	3.71	.025	0.64	75	1	140	.233	5.92	—
	.146	3.71	.025	0.64	93	1	210	.242	6.15	—
	.146	3.71	.024/.025	0.61/0.64	93	1	62, 62A, 62B	.242	6.15	—
	.146	3.71	.023/.025	0.59/0.64	75	1	59, 59A, 59B	.242	6.15	—
	.146	3.71	.025	0.64	93	1	—	.242	6.15	Belden 9269
G1	.142	3.61	.025	0.64	93	1	—	.200	5.08	Belden 89269
	.134	3.40	.023	0.58	75	1	—	.193	4.90	Belden 88241, Hi-Temp 62A, Times PL-62, Berk-Tek BTDC-59, BTDC-62
	.146	3.71	.025	0.64	75	1	302	.201	5.11	—

[1]Can use D group connectors if not weatherproof.

Cable-to-Connector Selection Guide (Continued)

RF Connectors (Continued)

Connector Cable Range Selection Code	Dielectric Core Size		Center Conductor O.D.		Nominal Impedance (ohms)	Number of Shields	RG Cable Numbers	Nom. Jacket O.D.		Cable Manufacturer
	inch	[mm]	inch	[mm]				inch	[mm]	
G2	.146	3.71	.032	0.81	75	1	—	.215	5.46	Hi-Temp 59, Times PL-59, PLF-59 (20 AWG C.C.)
G3	.146	3.71	.025	0.64	75	2	Double Shield	.270	6.86	—
G4	.144	3.66	.032	0.81	75	1	—	.242	6.15	Belden 9104, 9112, 9240
	.146	3.71	.030	0.76	75	1	—	.242	6.15	Belden 9167, 9259, 9266
	.146	3.71	.032	0.81	75	1	—	.242	6.15	Times FM-59
G5	.146	3.71	.032	0.81	75	1	—	.236	6.00	Belden 9145
	.148	3.76	.033	0.84	75	1	—	.236	6.00	AT&T 734A
H	.146	3.71	.025	0.64	93	2	71, 71A, 71B	.245	6.22	—
J	.185	4.7	.059	1.5	50	2	304	.280	7.11	—
J1	.180	4.57	.040	1.02	75	1	—	.270	6.86	Belden 9248, 9114
K	.185	4.7	.028	0.71	75	2	6, 6A	.332	8.43	—
K2	.200	5.08	.031	0.79	75	2	—	.305	7.75	Belden 8281, 9141, 9231, 88281 Western Electric 724, 728, 3049
L	.255	6.48	.084	2.13	50	2	115A	.415	10.54	—
	.247	6.27	.085	2.16	50	2	—	.375	9.53	Belden 89880
	.247	6.27	.085	2.16	50	2	—	.405	10.28	Belden 9880
	.247	6.27	.085	2.16	50	2	—	.375	9.53	Comm/Scope 2280
	.247	6.27	.085	2.16	50	2	—	.405	10.28	Comm/Scope 3250
M	.285	7.24	.085/.089	2.16/2.26	50	1	8, 8A, 213	.405	10.28	—
M1	.285	7.24	.048	1.22	75	1	11, 11A	.405	10.28	—
M2	.285	7.24	.103	2.62	50	1	—	.403	10.23	Belden 9914
	.285	7.24	.102	2.59	50	1	—	.405	10.28	Times FM-8
M3	.285	7.24	.064	1.63	75	1	—	.405	10.28	Alpha 9847
	.285	7.24	.064	1.63	75	1	—	.405	10.28	Belden 8213, 9292
M4	.285	7.24	.093	2.36	50	2	225, 393	.430	10.92	—
M5	.285	7.24	.108	2.74	50	1	—	.403	10.23	Belden 8214
N	.280/.285	7.11/7.24	.085/.088	2.16/2.24	50	2	9, 9A, 9B, 214	.420/.425	10.67/10.79	—
O	.119	3.02	.036	0.91	50	Tube	402 Semi-Rigid/ .141 [3.58]	—	—	—
P	.066	1.68	.020	0.51	50	Tube	405 Semi-Rigid/ .141 [3.58]	—	—	—
R	.144	3.66	.032	0.81	75	2	—	.270	6.86	Comm/Scope F59 HEC-2
S	.152	3.87	.023	0.58	75	2	—	.265	6.74	Comm/Scope S59 HEC

BNC Connectors, 50 Ohm

RF Connectors (Continued)


Twist-On


"O" Crimp


Single Crimp


Dual Crimp


Hex Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B	174 188, 188A 316	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	2-221128-1	—	58436-3	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225395-7	220009-1	—	220026-1
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-227079-6	220009-5	318450-2	220217-3
		Dual Crimp	Tin Lead	Nickel	Polyethylene	Commercial	—	1-227079-4	220009-5	318450-2	220217-3
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	2-331350-4	220009-1	—	220026-1
		Single Crimp	Gold	Nickel	Polypropylene	Mil Type	—	225527-9	69245-2	—	—
		Single Crimp	Gold	Silver	Polypropylene	Mil Type	—	2-330058-1	69245-2	—	69422
B1	179, 179A 179B, 161 187, 187A Belden 9221	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	2-221128-3	—	58436-3	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225395-8	220009-1	—	220026-1
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	2-227079-2	220009-5	318450-2	220217-3
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	2-331350-5	220009-1	—	220026-1
		Single Crimp	Gold	Silver	Polyethylene	Mil Type	—	2-329084-1	69245-1	—	69408
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329446-1	69245-1	—	69408
B3	RD 316, 188 Double Braid	Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	8-227079-2	69477-4	58539-1	—
C	Belden 9252 122	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	5-225395-7	69477-2	—	69669-2
C1	180, 180A 180B 195, 195A	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	2-221128-5	—	58436-3	—
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	2-331350-6	69477-2	—	69669-2
		SingleCrimp	Gold	Silver	TEFLON	Mil Type	—	2-329447-1	69246-1	—	69423
C2	Belden 8219	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	2-221128-7	—	58436-1[3]	—
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	6-227079-7[4]	220187-1	58435-1[2]	220217-1
	Belden 9907, 89907 Comm/ Scope 2104	Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	6-227079-8[5]	220187-1	318452-2	220217-1
C3	Belden 8218	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	1-225395-0	69477-2	—	69669-2
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-227079-9	69477-4	58539-1	58376-1
		Dual Crimp	Tin Lead	Nickel	Polyethylene	Commercial	—	1-227079-7	69477-4	58539-1	58376-1
D	58, 58A 58B, 58C	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	Bulk Packaged	221128-1	—	58436-1[3]	—
		Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-221128-0	—	58436-1[3]	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225395-1	69478-1	220189-3	69727
		Dual Crimp	Tin Lead	Nickel	Polyethylene	Commercial	—	227079-1	220187-1	220189-1	220217-1
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	227079-5	220187-1	58435-1[2]	220217-1
		Dual Crimp	Silver	Nickel	Polyethylene	Commercial	—	227079-9	220187-1	58435-1[2]	220217-1
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	16B0004	2-331350-1	69478-1	220189-3	69727
		Single Crimp	Gold	Silver	Polypropylene	Mil Type	—	2-329082-1	69140-1	—	69223-1
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329444-1	69140-1	—	69223-1
—	58	"O" Crimp	Gold	Nickel	—	Commercial	—	1-414582-3	—	58435-1	—
		"O" Crimp	Silver	Nickel	—	Commercial	—	414582-8	—	58435-1	—
		Hex Crimp	Gold	Nickel	—	Commercial	—	414586-1	—	58436-1	—
		Hex Crimp	Silver	Nickel	—	Commercial	—	414586-5	—	58436-1	—
		Twist-On	Gold	Nickel	—	Commercial	—	414580-2	—	—	—
—	59, 62, Belden 9291, 9209	Twist-On	Gold	Nickel	—	Commercial	—	414580-3	—	—	—
—	Plenum 59/62, Belden 88241, 89269, Berk Tek BTDC-59, BTDC-62	"O" Crimp	Silver	Nickel	—	Commercial	—	1-414582-2	—	220189-2	—
		Twist-On	Gold	Nickel	—	Commercial	—	414580-5	—	—	—

[1]Refer to pages 463-464 for code specifications.
[2]Order AMP PRO-CRIMPER Coaxial "O" Crimp Hand Tool assembly 58433-1, which includes dies 58435-1.
[3]Order AMP PRO-CRIMPER Coaxial Hex Crimp Hand Tool assembly 58433-2, which includes dies 58436-1.
[4]For use with Belden 9907, Comm/Scope 3104, Belden 8219 only.
[5]For use with Belden 89907, Comm/Scope 2104 only.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

RF Connectors (Continued)

Plugs, Crimp (Continued)


Twist-On


"O" Crimp


Single Crimp


Dual Crimp


Hex Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
D2	Belden 88240, Berk-Tek BTDC-58, Comm/ Scope 2135	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-221128-0	—	58436-1[3]	—
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	4-227079-3	220187-1	58435-1[2]	220217-1
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	4-225395-2	69478-1	220189-3	69727
E	223 55, 55A, 55B	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225395-3	69478-1	220189-3	69727
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	227079-6	220187-1	58435-1[2]	220217-1
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329444-2	69140-2	—	69424
E1	142, 142A, 142B, 400	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225395-6	69478-1	220189-3	69727
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	6-227079-1	220187-1	58435-1[2]	220217-1
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	16B0007	2-331350-9	69478-1	220189-3	69727
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-330358-2	69331-1	—	69429-1
G	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-221128-1	—	58436-1[3]	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225395-2	69477-1	58537-1	—
		Dual Crimp	Tin Lead	Nickel	Polyethylene	Commercial	—	227079-3	220187-2	220189-2	220217-2
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	227079-7	220187-2	58435-1[2]	220217-2
		Dual Crimp	Silver	Nickel	Polyethylene	Commercial	—	1-227079-1	220187-2	58435-1[2]	220217-2
		Single Crimp	Gold	Silver	Polypropylene	Mil Type	—	2-329083-1	69141-1	—	—
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329445-1	69141-1	—	—
G1	302, Belden 88241, 89269 Hi-Temp 62A Times PL62, Berk-Tek, BTDC-59, BTDC-62	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	4-225395-1	69477-1	58537-1	69669-1
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	4-227079-9	220187-2	58435-1[2]	220217-2
G2	Hi-Temp 59 Times PL59, PLF59 (20 AWG C.C.)	Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	5-227079-3	—	58537-1	—
G4	Belden 9104, 9240 9112, 9167, 9259, 9266 Times FM-59	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-221128-7	—	58436-1[3]	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	2-225395-0	69477-1	58537-1	69669-1
		Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-227079-3	220187-2	58537-1	—
J1	Belden 9248, 9114	Dual Crimp	Gold	Nickel	Polyethylene	Commercial	—	3-227079-0	220247-1	58539-1	—
K2	Belden 8281, 9141, 9231 Western Electric 724, 728, 3049	Hex Crimp	Gold	Nickel	Polyethylene	Commercial	—	1-221128-2	—	58436-2	—
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	4-331350-0	220043-1	58538-1	220088-1
M3	Alpha 9847 Belden 8213, 9292	Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	225886-5	220015-1	—	—

[1]Refer to pages 463-464 for code specifications.
[2]Order AMP PRO-CRIMPER Coaxial "O" Crimp Hand Tool assembly 58433-1, which includes dies 58435-1.
[3]Order AMP PRO-CRIMPER Coaxial Hex Crimp Hand Tool assembly 58433-2, which includes dies 58436-1.
[4]For use with Belden 9907, Comm/Scope 3104, Belden 8219 only.
[5]For use with Belden 89907, Comm/Scope 2104 only.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

RF Connectors (Continued)

Plugs, Field Serviceable

Commercial

Push-On

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.
D	58, 58A, 58B, 58C	Solder Clamp	Gold	Nickel	TEFLON	Push-On	—	222728-1
D, D1 E, E1	58, 58A, 58B, 58C, 141, 141A, 303, 223, 55, 55A, 55B, 142, 142A, 142B, 400	Solder Clamp	Gold	Nickel	TEFLON	Commercial	Category A	1-221265-0
G, G1 H	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269, 89269, 88241, Hi-Temp 62A, Times PL-62, Berk-Tek BTDC-59, BTDC-62, 302, 71, 71A, 71B	Solder Clamp	Gold	Nickel	TEFLON	Commercial	Category A	1-221265-1

[1]Refer to pages 463-464 for code specifications.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

Plugs, Twist-On

Related Product Data

Twist-On plugs must be used with cable that has a solid conductor. These plugs are not recommended for applications where the cable frequently moves or flexes.

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.
D	58, 58B	Twist-On	Gold	Nickel	Polymethyl-pentene	Commercial	—	414265-7
G	59, 59A, 59B	Twist-On	Gold	Nickel	Polymethyl-pentene	Commercial	—	414265-3

[1]Refer to pages 463-464 for code specifications.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Right-Angle Plugs, Crimp

Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B	174, 188, 188A, 316	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413959-3	—	58436-3	—
C2	Belden 9907, 89907, 8219, Comm/Scope 2104, 3104	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413959-6	—	58436-1	—
D	58, 58A, 58B, 58C	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413959-1	—	58436-1	—
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	225973-1	69478-1	220189-3	69727
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225974-1	69478-1	220189-3	69727
E	55, 55A 55B, 223	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225974-2	69478-1	220189-3	69727
E1	142, 142A 142B, 400	Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	225973-4	69478-1	220189-3	69727
G	124, 140 210 62, 62A, 62B 59, 59A, 59B Belden 9291, 9209, 9269	Dual Crimp	Gold	Nickel	TEFLON	Mil Type		225974-5	69477-1	58537-1	69669-1

[1]Refer to pages 463-464 for code specifications.

Jacks, Crimp

Single Crimp

Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B	174, 188, 188A 316	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413779-3	—	58436-3	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225396-7	220009-1	—	220026-1
		Dual Crimp	Gold	Nickel	Polypro-pylene	Commercial	—	228979-7	220009-5	—	220217-3
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-330062-1	69245-2	—	69422
B1	179, 179A, 179B, 161, 187, 187A, Belden 9221	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225396-8	220009-1	—	220026-1
C2	Belden 89907, 9907, 8219, Comm/Scope 3104, 2104	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413779-6	—	58436-1	—

[1]Refer to pages 463-464 for code specifications.

BNC Connectors, 50 Ohm (Continued)

Jacks, Crimp (Continued)

RF Connectors (Continued)

Single Crimp

Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
D	58, 58A, 58B, 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225396-1	69478-1	220189-3	69727
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	17B0004	2-331351-1	69478-1	220189-3	69727
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329545-1	69140-1	—	69223-1
D, D2	58, 58A, 58B, 58C, Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413779-1	—	58436-1	—
E	223, 55, 55A, 55B	Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329452-2	69140-2	—	69424
G	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291 9209, 9269	Dual Crimp	Gold	Nickel	Polypro-pylene	Commercial	—	228979-6	220187-2	58435-1[2]	220217-2
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225396-2	69477-1	58537-1	69669-1

[1]Refer to pages 463-464 for code specifications.
[2]Order AMP PRO-CRIMPER Coaxial "O" Crimp Hand Tool assembly 58433-1, which includes dies 58435-1.

Panel Jacks, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B	174, 188, 188A, 316	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225397-7	220009-1	—	220026-1

[1]Refer to pages 463-464 for code specifications.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

RF Connectors (Continued)

Bulkhead Jacks, Crimp

Single Crimp

Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B	174, 188, 188A, 316	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413771-3	—	58436-3	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225398-7	220009-1	—	220026-1
		Dual Crimp	Gold	Nickel	Polypro-pylene	Commercial	—	228980-7	220009-5	—	220217-3
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	—	1-331693-2	220009-1	—	220026-1
		Single Crimp	Gold	Silver	Polypro-pylene	Mil Type	—	2-330060-1	69245-2	—	69422
B1	179, 179A, 179B, 161, 187, 187A Belden 9221	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413771-4	—	58436-3	—
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225398-8	220009-1	—	220026-1
		Single Crimp	Gold	Sliver	Polyprol-pylene	Mil Type	—	2-329092-1	69245-1	—	69408
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329458-1	69245-1	—	69408
B3	Times RD316	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	1-225398-5	69477-2	—	69669-2
D, D2	58, 58A, 58B, 58C, Belden 88240, Berk-Tek BTDC-58, Comm/Scope 2135	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413771-1	—	58436-1	—
D	58, 58A 58B, 58C	Dual Crimp	Gold	Nickel	Polypro-pylene	Commercial	—	228980-5	220187-1	58435-1[2]	220217-1
		Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329456-1	69140-1	—	69223-1
E	223 55, 55A, 55B	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225398-3	69478-1	220189-3	69727
E1	142, 142A 142B, 400	Single Crimp	Gold	Silver	TEFLON	Mil Type	—	2-329456-2	69331-1	—	69429-1
G	124, 140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225398-2	69477-1	58537-1	69669-1

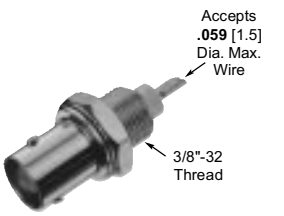
[1]Refer to pages 463-464 for code specifications.
[2]Order AMP PRO-CRIMPER Coaxial "O" Crimp Hand Tool assembly 58433-1, which includes dies 58435-1.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

Bulkhead Solder Jacks

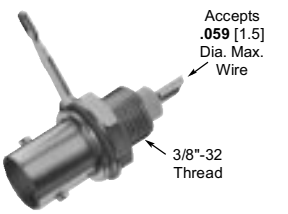
Body Plating — Nickel

Contact Material	Dielectric	Length	Part Numbers Without Solder Terminal[1]	Part Numbers With Solder Terminal[2]	Panel Thickness	Insulating Bushing
Silver	VALOX	**1.060** 26.93	227754-3	227755-3	**.046-.125** 1.17-3.18	227223-1
Gold	VALOX	**1.312** 33.33	—	227169-7	**.046-.250** 1.17-6.35	227223-1
		1.060 26.93	227754-2	227755-2	**.046-.125** 1.17-3.18	227223-1
	TEFLON	**1.312** 33.33	—	227169-8	**.046-.250** 1.17-6.35	227223-1
		1.060 26.93	227715-3	227716-3	**.046-.125** 1.17-3.18	227223-1
Tin Lead	VALOX	**1.312** 33.33	227169-1	227169-5	**.046-.250** 1.17-6.35	227223-1
		1.060 26.93	227754-1	—	**.046-.125** 1.17-3.18	227223-1

[1]Includes lockwasher and jam nut.
[2]Includes solder terminal and jam nut.
Note: See customer print or Catalog 82074 for recommended panel cutouts.



Without Solder Terminal



With Solder Terminal

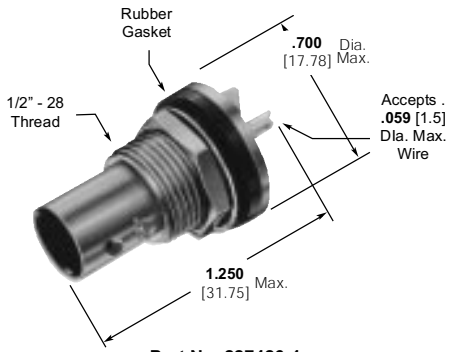
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

RF Connectors (Continued)

Sealed Bulkhead Solder Jack

Plating
Body — Nickel
Center Contact — Gold
Dielectric — Polymethylpentene
This connector is designed to prevent moisture from entering the interface from the rear of the connector.



Part No. 227426-1
Note: See customer print or Catalog 82074 for recommended panel cutouts.

Isolated Bulkhead Solder Jacks

Plating
Body — Nickel
Center Contact — See chart
Dielectric — White VALOX

Center Contact Plating	Part No.	Flange & Thread Material
Tin	227726-1	VALOX
Silver	227726-2	VALOX
Gold	227726-3	VALOX

Note: See customer print or Catalog 82074 for recommended panel cutouts.

Part No. 414194-1

Plating
Body — Nickel
Center Contact — Gold
Dielectric — Black VALOX
Flange & Thread Material — Black VALOX

Right-Angle PC Board/Panel Mount Jacks

Plating
Body — Nickel
Center Contact — See chart
Dielectric — Polymethyl Pentene

Body Material	Center Contact Plating	Part Numbers		
		Without Mounting Posts	With Mounting Posts	With Compliant Posts
VALOX, White	Tin-Lead	226990-1	227161-1	—
	Gold1	226990-3	—	—
	Gold1	—	227161-7	—
VALOX, Black	Tin-Lead	226990-2	227161-2	—
	Gold1	226990-6	227161-6	—
	Gold1	—	227161-9	—
	Gold1	—	415046-1	—
Metal	Tin-Lead	227433-1	227661-1	—
	Gold1	227676-1	227677-1	—
	Gold1	—	413879-1	—
High Temp. Housing	Gold1	—	1-227161-3[1]	—

Plating:
Gold1 — .000030 [0.00076] thick
[1]IR reflow compatible
Notes: 1. If an Insulating Bushing is required use part number 330620.
2. See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.

VALOX Body

Metal Body

Note: Screw for panel thickness of **3/32** [2.38] or greater **Part No. 221108-2.**
Screw for panel thickness of less than **3/32** [2.38] **Part No. 221108-4.**

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

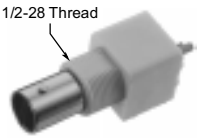
RF Connectors (Continued)

Vertical PC Board/Panel Mount Jacks

Plating
Body — Nickel
Center Contact — See chart
Dielectric — Polymethyl Pentene

Body Material	Center Contact Plating	Part Numbers	
		Without Mounting Posts	With Mounting Posts
VALOX, White	Tin-Lead	226993-1	227222-1
	Gold	226993-3	227222-3
VALOX, Black	Tin-Lead	226993-2	227222-2
	Gold	226993-6	227222-6
Metal	Tin-Lead	—	227671-1
	Gold	—	227673-1

Notes: 1. If an Insulating Bushing is required use part number 330620.
2. See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.



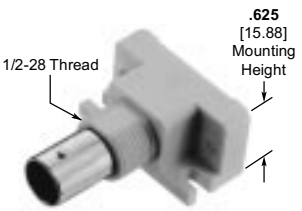
VALOX Body

Metal Body

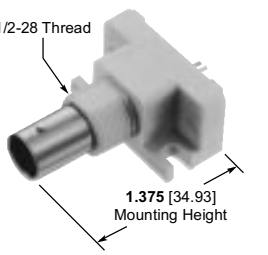
PC Board/Panel Mount Jacks with Mounting Flanges

Body Material	Center Contact Plating	Part Numbers	
		Right-Angle Mount	Vertical Mount
VALOX, White	Tin	226978-1	—
	Gold	226978-3	226987-7

Note: See customer print or Catalog 82074 for recommended panel cutouts.



Right-Angle Mount



Vertical Mount

Vertical Metalized PC Board Mount Jacks

Body Plating	Center Contact Plating	Dielectric	Part Numbers	Style	Leg Length
Nickel	Silver	VALOX	227699-1	A	.250 6.35
	Gold	VALOX	227699-2	A	.250 6.35
	Tin	VALOX	227699-3	A	.250 6.35
	Gold	VALOX	221123-2	B	.190 4.83
	Silver	VALOX	222420-1	C	.175 4.45
Tin-Lead	Gold	TEFLON	413969-2	D	.130 3.30
	Silver	VALOX	414305-1	C	.125 3.18
Nickel	Gold	VALOX	414460-1[1]	A	.150 3.81

[1]With **.030** [.76] standoffs on top of legs.
Note: See customer print or Catalog 82074 for recommended PC board layouts.


Style A


Style B


Style C

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

Right-Angle PC Board Mount Jacks

RF Connectors (Continued)

Body Plating	Dielectric	Center Contact Length	Part Number
Nickel	Polymethyl Pentene	**.171** 4.34	413631-1
Tin-Lead	TEFLON	**.171** 4.34	413631-2
Nickel	Polymethyl Pentene	**.131** 3.33	413631-3

Note: See customer print or Catalog 82074 for recommended PC board layouts.

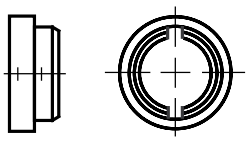
Body	Dielectric	Contact	Part Number
Nickel	TPX	Gold	414373-1
Tin-Lead	TPX	Gold	414373-4[1]

[1]Board retention leg prevents connector from tipping during wave solder. For 414373-4 only.

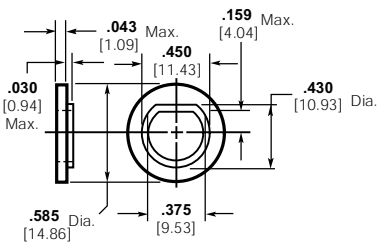
Note: See customer print or Catalog 82074 for recommended PC board layouts.

Insulating Bushing

Material — Nylon
Part No. 222163-1



Note: See customer print or Catalog 82074 for recommended PC board layouts.

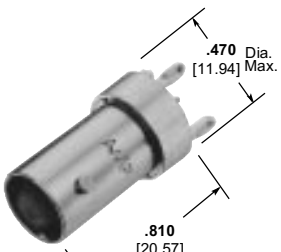


Part No. 227223-1

Press Fit Terminal

Plating

Body — Nickel
Center Contact — Gold
Dielectric — TEFLON
Product Specification
108-12103
Application Specification
114-12001



Part No. 222006-1

Note: See customer print or Catalog 82074 for recommended PC board layouts.

Right-Angle Adapters

(Jack-Plug)

Body Plating	Center Contact Plating	Dielectric	Part No.	Style
Nickel	Gold	TEFLON	222165-2	A
Nickel	Gold	Polymethylpentene	414666-1	B

Style A

Style B

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 50 Ohm (Continued)

RF Connectors (Continued)

Bulkhead Jack Adapters
(Jack-Jack)

Body Plating	Center Contact Plating	Dielectric	Part No.	Comparable UG/U Connector
Nickel	Gold2	Poly-ethylene	228226-1	—

Plating:
Gold2— .000050 [0.00127] thick
Notes: 1. If an Insulating Bushing is required use part number 330620.
2. See customer print or Catalog 82074 for recommended panel cutouts.

Jack Covers

Body Plating	Part No.
Nickel	1-330022-2

Feed-Thru Adapters (Jack-Jack)

Body Plating	Center Contact Plating	Dielectric	Style	Part No.	Comparable UG/U Connector
Nickel	Silver	TEFLON	A	221551-1	914
Nickel	Gold	TEFLON	A	221551-3	
Nickel	Gold	Polymethyl-pentene	B	414414-1	—

Style A

Style B

Terminator Plugs – 50, 75, 93 Ohms

Resistor Specification	Part Numbers	
	With Tether	Without Tether
1 Watt, 50 Ohms	221629-1	221629-4
1 Watt, 75 Ohms	—	221629-5
1 Watt, 93 Ohms	—	221629-6
1 Watt, 50 Ohms	1-221629-6[1]	—

[1] Tether is conductive with #4 stud size

Plating

Body — Nickel
Center Contact — Gold
Dielectric — Polyethylene

BNC Connectors, 75 Ohm
Plugs and Right-Angle Plugs, Crimp

These connectors have been designed for optimum performance and have a true 75 ohm impedance the complete length of the connector. The crimp die tooling listed below is different from the equivalent 50 ohm connectors.

Plug

Right-Angle Plug

Plugs

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B1	179, 179A, 179B, 187, 187A, 161, Belden 9221	HexCrimp	Gold	Nickel	Polyethelene	Commercial	—	413589-8	—	58425-2	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-8	—	318451-2	—
B4	AT&T 735A	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	1-413589-0	—	58425-2	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	1-221185-8	—	58174-1	58248-3
C3	Belden 8218	Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-3	—	58174-1	58248-3
G	140, 210, 62, 62A, 62B, 59, 59A, 59B, Belden 9291, 9209, 9269	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413589-2	—	58425-1	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-2	—	58536-1	58248-2
G1	302, Belden 89269, 88241, Hi-Temp 62A, Times PL-62, Berk Tek BTDC-59, BTDC-62	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413589-1	—	58425-1	—
G4	Belden 8212, 9104, 9112, 9167, 9240, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413589-9	—	58425-1	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-9	—	58536-1	58248-2
G5	Belden 9145, AT&T 734A	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413589-7	—	58425-1	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	1-221185-0	—	58536-1	—
J1	Belden 9248, 9114	Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-1	—	58536-1	—
K	6, 6A	Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-7	—	58538-1	58248-1
K2	Belden 8281, 9141, 9231, Western Electric 724, 728, 3049	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413589-5	—	58425-3	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221185-5	—	58538-1	58248-1

[1]Refer to pages 463-464 for code specifications.

Right-Angle Plugs, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B1	179, 179A, 179B, 187, 187A, 161 Belden 9221	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413588-8	—	58425-2	—
B4	AT&T 735A	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	1-413588-0	—	58425-2	—
G	140, 210, 62, 62A, 62B, 59, 59A, 59B Belden 9291, 9209, 9269	Hex Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	413588-2	—	58425-1	—
		Dual Crimp	Gold	Nickel	Polymethyl-pentene	Commercial	—	221402-2	—	58536-1	—

[1]Refer to pages 463-464 for code specifications.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 75 Ohm (Continued)

RF Connectors (Continued)

Plugs

Plating
Body — Nickel
Center Contact — Gold

JIS Cable	Termination Type	Dielectric	Impedance	Part No.	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1
2.5C-2V	Hex Crimp	Polymethylpentene	75Ω	1-413589-6	58425-2

Jacks and Bulkhead Jacks, Crimp

Jack

Bulkhead Jack

Jacks

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B1	179, 179A, 179B, 161, 187, 187A Belden 9291,	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413760-8	—	58425-2	—
		DualCrimp	Gold	Nickel	Polyethelene	Commercial	—	221199-6	—	318451-2	—
G	140, 210 62A, 62B,59, 59A, 59B, Belden 9291, 9209, 9269	Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221199-2	—	58536-1	58248-2
G4	Belden 8212, 9104, 9112, 9240, 9167, 9259, 9266, Times FM-59, (RG-59 Type with 20 AWG C.C.)	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413760-9	—	58425-1	—

[1]Refer to pages 463-464 for code specifications.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

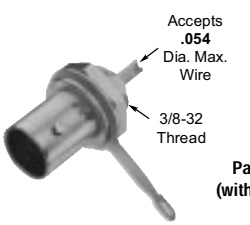
Bulkhead Jacks, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
B1	179, 179A, 179B, 161, 187, 187A; Belden 9221	Hex Crimp	Gold	Nickel	Polyethelene	Commercial	—	413590-8	—	58425-2	—
		Dual Crimp	Gold	Nickel	Polyethelene	Commercial	—	221221-5	—	318451-2	—

[1]Refer to pages 463-464 for code specifications.

Rear Mount Bulkhead Solder Jack

Plating
Body — Nickel
Center Contact — Gold
Note: See customer print or Catalog 82074 for recommended panel cutouts.



Part No. 221244-1
(with Solder Terminal)

For Complete Product Information, Order Catalog 82074

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 75 Ohm (Continued)

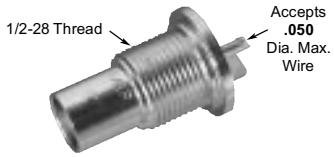
RF Connectors (Continued)

Front Mount Sealed Bulkhead Solder Jack

Plating

Body — Nickel
Center Contact — Gold
Dielectric — Polymethylpentene

Note: See customer print or Catalog 82074 for recommended panel cutouts.



Part No. 414217-1

Right-Angle PC Board/Panel Mount Jacks

Outer Shell — Nickel
Dielectric — Polymethylpentene
Contact — See Chart

Body Material	Center Contact Plating	Part Number
VALOX, White	Gold1	413194-1
VALOX, Black	Gold1	413194-2
VALOX, White	Gold2	414459-1
Metal	Gold1	222092-1
Metal (Economy)[1]	Gold1	414409-1
—	Silver	222092-2
Metal	Gold1	414907-1

Plating:
Gold1 — .000030 [0.00076] thick
Gold2 — .000050 [0.00127] thick
[1]Stamped and formed contact, Phosphor Bronze contact material
Note: 1. If an Insulating Bushing is required use part number 330620. Phosphor Bronze contact material
2. See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.

Screw for panel thickness of **3/32** [2.38] or greater
Part No. 221108-2.
Screw for panel thickness of less than **3/32** [2.38]
Part No. 221108-4.

VALOX Body

Metal Body

Vertical PC Board/Panel Mount Jacks

Plating

Outer Shell — Nickel
Center Contact — See Chart
Dielectric — Polymethylpentene

Body Material	Center Contact Plating	Part Number
VALOX, Black	Gold1	413528-1 413933-1[1]
VALOX, Black (Economy)[2]	Gold	415632-1
Metal	Gold1	222132-1

Plating:
Gold1 — .000030 [0.00076] thick
[1]Without mounting posts
[2]Stamped and formed contact, Phosphor Bronze contact material
Notes: 1. If an Insulating Bushing is required see part number 330620.
2. See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.

Screw for panel thickness of **3/32** [2.38] or greater
Part No. 221108-2.
Screw for panel thickness of less than **3/32** [2.38]
Part No. 221108-4.

VALOX Body

Metal Body

Vertical Metalized PC Board Mount Jacks

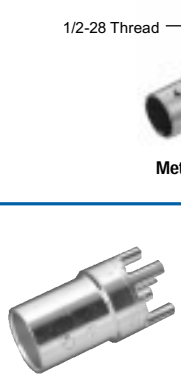
Plating

Body — See chart
Center Contact — See chart
Dielectric — TEFLON

Body Plating	Center Contact Plating	Part Numbers
Nickel	Gold	413885-1
Tin-Lead	Gold	413885-3
Tin-Lead	Gold	414394-1
Nickel	Silver	413986-1

Note: See customer print or Catalog 82074 for recommended PC board layouts.

Style A



Style C

Style B

Press Fit

Plating

Body — Nickel
Center Contact — Gold
Dielectric — TEFLON

Length	Part No.
.810 20.57	222462-1
.640 16.26	414088-1

For Complete Product Information, Order Catalog 82074

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

BNC Connectors, 75 Ohm (Continued)

Press Fit Vertical Metalized PC Board Mount Jacks (Continued)

PC Board Thickness
.093 [2.36] Min.
Part No. 221336-3

Note: See customer print or Catalog 82074 for recommended PC board layouts.

Right-Angle PC Board Mount Jack

Body Plating	Dielectric	Contact Plating	Center Contact Dimension	Part Number
Nickel	TPX	Gold2	.171	413558-1
Tin-Lead	TEFLON	Gold2	.171	413558-2

Gold1 — .000030 [0.00076] thick
Gold2 — .000050 [0.00127] thick

Note: See customer print or Catalog 82074 for recommended PC board layouts.

Bulkhead Jack Adapter

Plating

Body — Nickel
Center Contact — Gold
Dielectric — Polymethylpentene

Part No. 222117-1

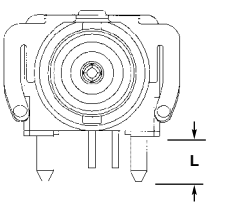
Note: See customer print or Catalog 82074 for recommended PC board layouts.

Decoupled Connectors

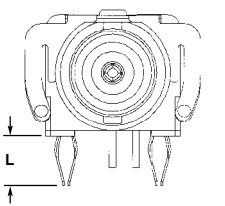
Mounting Post Styles

Vertical Mount BNC Style A

Right-Angle Mount BNC Style B



Standard



Compliant

Description	Capacitance/ Voltage	Clip	Mounting Post	Style	Part No.
Vertical	9400pF 1500VDC	Standard	Standard	A	413476-2
Low Profile Right Angle	9400pF 500VDC	Standard	Standard	B	413515-1
	9400pF 1500VDC	Standard	Standard	B	413515-2
	7900pF 1600VDC	Standard	Compliant	B	413515-7
	9400pF 1500VDC	Standard	Compliant	B	413515-8
	9400pF 1500VDC	Standard	Compliant	B	413515-9
Standard Right Angle	9400pF 1500VDC	Standard	Standard	B	413524-2
	9400pF 1500VDC	Standard	Compliant	B	413524-5
Low Profile Right Angle w/ Special Clip & High Temperature Housing	9400pF 500VDC	Extended	Compliant	B	414284-1

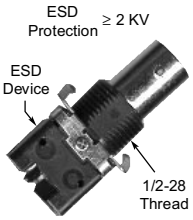
Note: See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

RF Connectors (Continued)

Decoupled Connectors, (Continued)

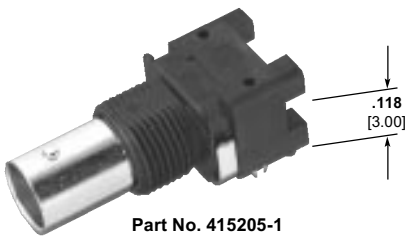
Right-Angle Decoupled to Panel ESD Protected



Description	Capacitance/ Voltage	Contact Plating	Clip	Mounting Post	L Mounting Post Length	B	A	Part No.
50Ω Product								
Low Profile Right Angle W/ ESD Protection	7900pF 1500VDC	Gold1	Standard	Compliant	**.110** 2.79	**.519** 13.18	**.272** 6.91	414651-3
Low Profile Right Angle W/ Short Electrical Path ESD Protection	9400pF 1500VDC	Gold1	Short Electrical Path	Compliant	**.185** 4.70	**.519** 13.18	**.272** 6.91	415010-1

Note: See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.
Gold1 — .000030 [0.00076] thick.

Right-Angle BNC Decoupled to Board



Part No. 415205-1

Note: See customer print or Catalog 82074 for recommended PC board layouts.

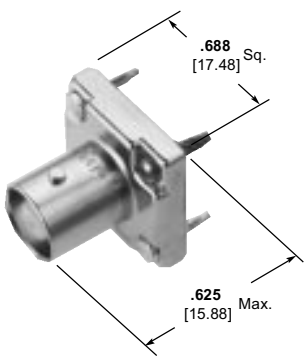
BNC Jack, PC Board Action Pins

Material

Dielectric— TEFLON
Isolation Pad—Polyester

Plating

Body — Nickel
Ground Clip— Nickel
Center Contact —Gold
Action Pin Legs—Gold



Part No. 414553-1 50 Ohm
Part No. 414493-1 75 Ohm

Note: See customer print or Catalog 82074 for recommended PC board layouts.

50Ω and 75Ω BNC Bulkhead Jacks, Crimp

Connector Cable Range Selection Code		RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	Part No.	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
50V	D	RG58, 58A, 58B, 58C	Hex Crimp	Gold	Nickel	Polymethylpentene	Commercial	414758-1	58465-1
50V	B	RG174, 174A, 316, 188, 188A	Hex Crimp	Gold	Nickel	Polymethylpentene	Commercial	414758-2	58465-3

Note: See customer print or Catalog 82074 for recommended panel cutouts.

Note: See customer print or Catalog 82074 for recommended PC board layouts.

TNC Connectors, 50 Ohm

RF Connectors (Continued)

Plugs, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
D	58, 58A, 58B, 58C	Hex Crimp	Gold	Nickel	Polypropylene	Commercial	—	222506-1	—	58436-1[3]	—
D, D1	58, 58A, 58B, 58C 141, 141A, 303	Dual Crimp	Gold	Nickel	Polypropylene	Commercial	—	227000-5	220187-1	58435-1[2]	220217-1
D1	141, 141A, 303	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225555-5	220045-2	—	—
C2, D1	Belden 9907, 89907, 8219, CommScope 3104, 2104, RG141, 141A, 303	Hex Crimp	Gold	Nickel	Polypropylene	Commercial	—	222506-8	—	58465-1	—
E	223, 55, 55A, 55B	Hex Crimp	Gold	Nickel	Polypropylene	Commercial	—	225550-1	—	58465-1	—
E1	142, 142A 142B, 400	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225555-6	220045-2	—	—
G	124, 140, 210 62, 62A, 62B 59, 59A, 59B Belden 9291 9209, 9269	Dual Crimp	Gold	Nickel	Polypropylene	Commercial	—	227000-7	220187-2	58435-1[2]	220217-2
M	8, 8A, 213	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225555-7	220015-1	—	—
M3	, Alpha 9847, Belden 8213, 9292,	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	222550-3	—	—	—
M4	225, 393	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	1-225550-2	220015-1	—	—
N	9, 9A, 9B, 214	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	1-225550-8	220015-1	—	—

[1]Refer to pages 463-464 for code specifications.
[2]Order AMP PRO-CRIMPER Coaxial "O" Crimp Hand Tool assembly 58433-1, which includes dies 58435-1.
[3]Order AMP PRO-CRIMPER Coaxial Hex Crimp Hand Tool assembly 58433-2, which includes dies 58436-1.

Right-Angle Plugs, Crimp

Weatherproof

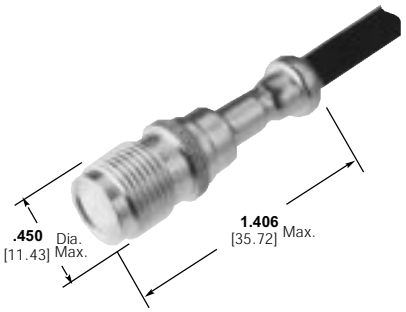
Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
D	58, 58A, 58B 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225559-2	220045-2	—	—
E1	142, 142A, 142B 400	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	225554-6	220045-2	—	—
M4	393, 225	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	1-225554-1	220015-1	—	—

[1]Refer to pages 463-464 for code specifications.

RF Connectors (Continued)

TNC Connectors, 50 Ohm
(Continued)

Jacks, Crimp



Weatherproof

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
D	58, 58A, 58B 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225551-2	220045-2	—	—
E1	142, 142A, 142B 400	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	225551-6	220045-2	—	—

[1]Refer to pages 463-464 for code specifications.

Bulkhead Jacks for Semi-Rigid Cable, Rear Mount

Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.
0	402 Semi-Rigid/.141	Crimp	Gold	Nickel	TEFLON	Mil Type		228502-2

[1]Refer to pages 463-464 for code specifications.

Bulkhead Jacks, Crimp

Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	CERTI-CRIMP Hand Tool with Integral Die	Interchangeable Dies for PRO-CRIMPER Hand Tool 354940-1 or PRO-CRIMPER Adapter 678304-1	Interchangeable Dies for Hand Tool 69710-1 & 626 Pneu. Head 318161-1
D	58, 58A, 58B 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225557-2	220045-2	—	—
E1	142, 142A, 142B 400	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225557-6	220045-2	—	—

[1]Refer to pages 463-464 for code specifications.

TNC Connectors, 50 Ohm (Continued)

RF Connectors (Continued)

Right-Angle PC Board/Panel Mount Jacks

Body Material	V	Center Contact Plating	Dimensions A	Dimensions B	Part Numbers Without Mounting Posts	Part Numbers With Mounting Posts
Metal	50	Gold	**.325** 8.26	**.820** 20.83	227838-1	227839-1

Note: See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.

Metal Body

Vertical PC Board/Panel Mount Jacks

Body Material	Center Contact Plating	Part Numbers Without Mounting Posts	Part Numbers With Mounting Posts
Metal	Gold	—	227835-1

Note: See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.

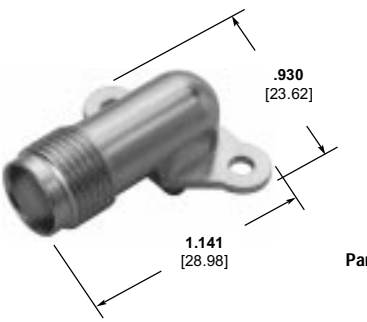
2-56 Self-Tapping Screws
For 3/32 [1.57] or greater panel thickness
Part No. **221108-2.**
For less than 3/32 [1.57] panel thickness
Part No. **221108-4.**

Metal Body

Right-Angle PC Board Panel Mount Jacks

Plating

Body — Nickel
Center Contact — Gold
Dielectric — TEFLON



Part No. 413993-1

Bulkhead Solder Jacks

Plating

Body — Nickel
Center Contact — Gold

Dim. L	Dielectric	Panel Thickness	Part Numbers With Solder Terminal	Part Numbers Without Solder Terminal
1.312 33.33	VALOX	**.046-.250** 1.17-6.35	—	227764-2

Note: See customer print or Catalog 82074 for recommended panel cutouts.

Bulkhead Jack Adapter

Plating

Body — Nickel
Center Contact — Gold
Dielectric — Acetal

Note: See customer print or Catalog 82074 for recommended panel cutouts.

Part No. 221500-1

N Connectors, 50 Ohm

RF Connectors (Continued)

Plugs, Crimp

Mil Type
Dual Crimp

Semi-Rigid Cable

Commercial
Dual Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	Integral Die Hand Tool
D	58, 58A, 58B 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	1-225661-2	220045-2
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225661-1[2]	220045-2
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	225392-7[2]	220045-2
E	223, 55, 55A, 55B	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	1-225661-1[2]	220045-2
E1	142, 142A, 142B	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	1-225361-5[2]	220045-2
	400	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	225699-1[2]	220045-2
L	115A Belden 89880	Hex Crimp	Gold	Nickel	TEFLON	Commercial	—	414160-3	58501-1[4]
M	8, 8A 213	Hex Crimp	Gold	Nickel	TEFLON	Commercial	—	1-414160-1[2]	58501-2[3]
		Dual Crimp	Gold	Nickel	TEFLON	Commercial	—	1-227086-0[2]	220015-1[2]
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225661-2	220015-1
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	01B0007	51692-2	220015-1
		Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	225662-2	220015-1
M3	393	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	1-225662-8	58501-1[4]
N	9, 9A, 9B	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225661-1	220015-1
		Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225662-2	220015-1
		Dual Crimp	Gold	Nickel	TEFLON	Commercial	—	1-227086-1	220015-1
O	402 Semi-Rigid/.141	Crimp	Gold	Nickel	TEFLON	Mil Type	—	228440-1	[5]

[1] Refer to pages 463-464 for code specifications.
[2] Hand Tool 69710-1, Pneumatic Tools 69365 and 69365-3, with Die Insert 220062-1, are available to terminate these connectors.
[3] Order PRO-CRIMPER II Coaxial Hex Crimp Hand Tool assembly Part No. 58501-2, which includes die Part No. 58485-2.
[4] Order PRO-CRIMPER II Coaxial Hex Crimp Hand Tool assembly Part No. 58501-1, which includes die Part No. 58485-1.
[5] Tooling — Hand Tool No. 59980-1, Requires (2) Crimping Dies No. 312253-1 and (1) Locator No. 220220-2.
Pneumatic Tool No. 58318-1, Requires (2) Crimping Dies No. 313720-1 and (1) Locator No. 220241-1.

Right-Angle Plugs, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	Integral Die Hand Tool
E1	142, 142A, 142B, 400, Belden 9246	Dual Crimp	Gold	Silver	TEFLON	Mil Type	Weatherproof	225394-2[2]	220045-2
M	8, 8A, 213	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	225669-2	220015-1
N	9, 9A, 9B 214	Dual Crimp	Gold	Silver	TEFLON	Mil Type	05B0003	225014-3	220015-1

[1] Refer to pages 463-464 for code specifications.
[2] Hand Tool 69710-1, Pneumatic Tools 69365 and 69365-3, with Die Insert 220062-1, are available to terminate these connectors.

N Connectors, 50 Ohm
(Continued)

Jacks, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	Integral Die Hand Tool
D	58, 58A, 58B, 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	1-225664-2	220045-2
M	8, 8A, 213	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225664-2	220015-1

[1]Refer to pages 463-464 for code specifications.

Bulkhead Jacks, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	Integral Die Hand Tool
D	58, 58A, 58B, 58C	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	—	1-225663-1	220045-2
M	8, 8A, 213	Dual Crimp	Gold	Nickel	TEFLON	Mil Type	Weatherproof	225094-2	220015-1

[1]Refer to pages 463-464 for code specifications.
*Hand Tool 69710-1, Pneumatic Tools 69365 and 69365-3, with Die Insert 220062-1, are available to terminate these connectors.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

Bulkhead Jacks for Semi-Rigid Cable

Rear Mount

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	M39012/ Military No. and/or Comments	Part No.	Integral Die Hand Tool
0	402 Semi-Rigid/.141	Crimp	Gold	Nickel	TEFLON	Mil Type	Rear Mount	228658-1	[2]

[1]Refer to pages 463-464 for code specifications.
[2]Tooling — Hand Tool No. 59980-1, Requires (2) Crimping Dies No. 312253-1 and (1) Locator No. 220220-2.
Pneumatic Tool No. 58318-1, Requires (2) Crimping Dies No. 313720-1 and (1) Locator No. 220241-1.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

Feed-Thru Jack Adapter
(Jack-Jack)

Plating

Body — Nickel
Dielectric — General Purpose Polypropylene

Contact — Gold plated
Part No. 227945-1

Terminators

Plating

Body — Nickel
Dielectric — TEFLON

Plug

Contact — Gold plated
Part No. 227953-1

Jack

Contact — Gold plated
Part No. 227997-1

UHF Connectors, Miniature

Plugs, Crimp

Nickel Plating

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Part No.	Integral Die Hand Tool	Die Insert for Tools: Hand Tool-69710-1 Pneu.-69365, 69365-3	Dies for AMP-O-LECTRIC Machine 220152-1
D	58, 58A, 58B, 58C	Dual Crimp	Tin	Nickel	Polypropylene	226600-1	220149-1	58158-1	220162-1

[1]Refer to pages 463-464 for code specifications.

Jacks, Crimp

Stamped and Formed Contacts
P/N **414478-2**
for use with P/N **414477-1**

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Part No.	Integral Die Hand Tool	Die Insert for Tools: Hand Tool-69710-1 Pneu.-69365, 69365-3	Dies for AMP-O-LECTRIC Machine 220152-1
B	316	Dual Crimp	Gold	Nickel	Polymethyl-pentene	414477-1[3]	—	58159-1	—
D	58, 58A, 58B, 58C	Dual Crimp	Tin	Nickel	Polypropylene	226602-1	220149-1 58124-1[2]	58158-1	220162-1

[1]Refer to pages 463-464 for code specifications.
[2]Economy hand tool does not have CERTI-CRIMP ratchet feature.
[3]To terminate stamped and formed center contact **414478-2** use AMP-O-LECTRIC machine **565435-5** with applicator **567386-2.**

Bulkhead Jacks, Crimp

Connector Cable Range Selection Code†	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Flange Shape	Rubber Gasket	Part No.	Integral Die Hand Tool	Die Insert for Tools: Hand Tool-69710-1 Pneu.-69365, 69365-3
B	174, 316 188, 188A	Dual Crimp	Tin	Nickel	Polypropylene	Hex	No	228665-2	58124-1[2]	58159-1

[1]Refer to pages 463-464 for code specifications.
[2]Economy hand tool – does not have CERTI-CRIMP ratchet feature.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

UHF Connectors, Miniature

(Continued)

Panel Solder Jack

Termination Type	Center Contact Plating	Body Plating	Dielectric	Part No.	Integral Die Hand Tool	Die Insert for Tools: Hand Tool-69710-1 Pneu.-69365, 69365-3
Solder	Tin	Nickel	TPX	226601-3[1] (Pre-Plated)	—	—

[1]Stamped and formed contact.
Note: See customer print or Catalog 82074 for recommended panel cutouts.

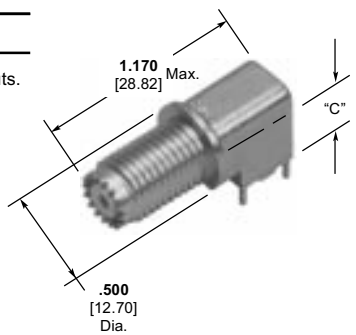
Part No. 226601-3

Right Angle PC Board Jack

Body Plating	Dielectric	"C"	Part Number
Tin-Lead	T	.348 8.84	415069-2

Note: See customer print or Catalog 82074 for recommended panel cutouts.

Part No. 415069-2



RF Connectors (Continued)

UHF Connectors, Standard

Plugs, Crimp

Style 1

Style 2

Connector Cable Range Selection Code[1]	RG/U Cable	Termination Type	Center Contact Plating	Body Plating	Dielectric	Style	Part No.	Integral Die Hand Tool	Crimping Dies for AMP-O-LECTRIC Machine 220152-1
D	58, 58a	Single Crimp	Tin	Nickel	Polyproylene	1	226279-1	220045-2	—
	58B,58C	Single Crimp	Silver	Silver	Polyproylene	2	1-226279-3	220045-2	—
G	124, 140, 210 59, 59A, 59B, 62, 62A, 62B, Belden 9291, 9209, 9269, 89269	Single Crimp	Tin	Nickel	Polypropylene	1	226279-3	220094-1[2] 220148-1[3]	—
M	8, 8A, 213	Single Crimp	Tin	Nickel	Polypropylene	1	226279-2	220095-1	—

[1]Refer to pages 463-464 for code specifications.
[2]CERTI-CRIMP Hand Tool.
[3]Stamped Hand Tool – does not have CERTI-CRIMP ratchet feature.

Jack, Crimp

Connector Cable Range Selection Code[1]	RG/U Cable	Connector Type	Termination Type	Center Contact Plating	Body Plating	Dielectric	Part No.	Integral Die Hand Tool	Crimping Dies for AMP-O-LECTRIC Machine 220152-1
D	58, 58A, 58B, 58C	Jack	Single Crimp	Tin	Nickel	Polypropylene	226694-1	—	220165-1

[1]Refer to pages 463-464 for code specifications.

F Series Connectors

Plugs

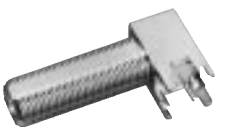
RG/U Cable	Termination Type	Body Plating	Part No.	Threads
6	Crimp	Nickel	221539-2	
59	Screw-On	Nickel	221540-1	1/4-20 UNC-2B

Screw-On Style

Right-Angle, PC Board Mount Jack, High Temperature

Dielectric			Solder Post Plating	Part Number
Bottom	Middle	Front		
Acetal	Acetal	Polypropylene	Nickel	415024-1

Note: See customer print or Catalog 82074 for recommended panel cutouts and PC board layouts.



Right Angle PC Board Plug

Includes board retention feature to prevent tiping during solder process.
Tin-Lead plated body to facilitate soldering process.

Part No. 415506-1

F Jack to G Jack Bulkhead Adapter Sealed

Contact Plating— Tin-Lead
Shell Plating— Nickel
Clip Plating— Tin-Lead
Sealed to 15PSI

Part No. 887058-1

Miscellaneous Products

Table of Contents **Click Below**

Miscellaneous Products

Miscellaneous Products (Continued)

Printed Circuit Board Jacks — Through-Hole Side Entry, Low Profile

Material and Finish

Housing — Through-Hole: Polyester, UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate

Description	Contacts Loaded	Part Numbers		
		Tray Packed	Tube Loaded	(IR) Compatible
6-Position with Panel Stops	6	555163-1	555163-4	—
6-Position with Panel Stops	4	555163-2	—	—
6-Position without Panel Stops	6	555165-1	—	569026-1
6-Position without Panel Stops	4	555165-2	—	—
6-Position without Panel Stops	2	555165-5	—	—
8-Position without Panel Stops	8	555164-1	—	—
8-Position Keyed with Panel Stops	8	555166-1	—	—
8-Position Keyed without Panel Stops	8	555167-1	555167-3	—
8-Position Keyed without Panel Stops	6	—	—	569118-1

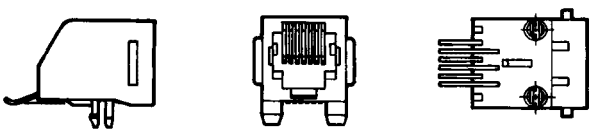
Notes:
1. On any modular jack, Terminal No. 1 is the terminal to the extreme left as you face the jack opening, tab notch down.
2. All jacks are wave solder compatible, unless otherwise noted.

6-Position Jack

Printed Circuit Board Jacks — Surface Mount Side Entry, Low Profile

Material and Finish

Housing — Polyphenylene Sulfide, UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate



6-Position Jack

Description	Contacts Loaded	Part Numbers	
		Tray Packed	Tube Loaded
6-Position with Panel Stops	6	555077-1	—
6-Position without Panel Stops	6	557314-1	—
8-Position with Panel Stops	8	555248-1	—
8-Position without Panel Stops	8	555764-1	555764-3
8-Position Keyed with Panel Stops	8	555078-1	—

Notes:
1. On any modular jack, Terminal No. 1 is the terminal to the extreme left as you face the jack opening, tab notch down.
2. All SMT Jacks are IR reflow processing compatible.

Printed Circuit Board Jacks — Through-Hole, Top Entry

Material and Finish

Housing — Polyester (wave solder compatible), UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate

Description	No. of Pos.	No. of Contacts	Jack Part Numbers	
			Tray Loaded	Tube Loaded
Top Entry with Panel Stops	4	4	520257-2	—
	6	4	520258-2	—
	6	6	520258-3	—
	8	8	520259-4	—
	8 Keyed	8	520260-4	—
Top Entry without Panel Stops	4	4	558872-1	—
	6	4	520425-2	—
	6	6	520425-3	—
	8	8	556416-1	556416-2
	8 Keyed	8	555799-1	—

4-Position Jack

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Modular Interconnection System

Miscellaneous Products (Continued)

Printed Circuit Board Jacks — Through-Hole, Shielded, Top Entry

Material and Finish

Housing — Polyester (wave solder compatible), UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate

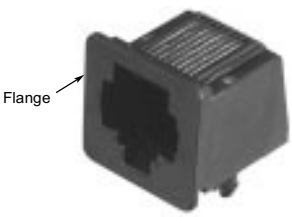
Description	No. of Pos.	No. of Contacts	Jack Part Number
Top Entry, Shielded with Panel Stops	8	8	557969-1
Top Entry, Shielded with Panel Stops, Keyed	8	8	557730-1

Printed Circuit Board Jacks — Through-Hole, Side Entry with Center Latch, Standard Height

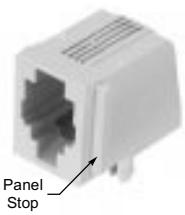
Material and Finish

Housing — Polyester (wave solder compatible), UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate

Description	No. of Pos.	No. of Contacts	Jack Part Numbers	
			Tray Loaded	Tube Loaded
Side Entry Flanged	4	4	520241-2	—
	6	4	520242-2	—
	6	6	520242-3	—
	8	8	520243-4	—
Side Entry with Panel Stops	4	4	520249-2	—
	6	2	520250-1	—
	6	4	520250-2	520250-9
	6	6	520250-3	—
	8	8	520251-4	—
	8 Keyed	8	520252-4	—
Side Entry without Panel Stops	4	4	555980-1	—
	6	2	520470-4	—
	6	4	555979-1	—
	6	6	520470-3	—
	8	8	520426-4	—
	8 Keyed	8	554517-1	—



8-Position with Flange



4-Position with Panel Stops

Printed Circuit Board Jacks — Low Profile (11.5mm)

Material and Finish

Housing — Polyester (wave solder compatible), UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate

8-Position Jack with 8 Contacts
Black Color

Part Number 215877-7

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

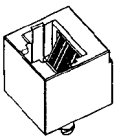
Miscellaneous Products (Continued)

Printed Circuit Board Jacks — High Performance Modular Jacks

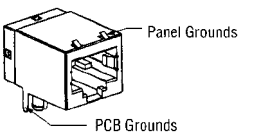
Material and Finish

Housing — Polyester, black, UL 94V-0 rated
Contact — Phosphor bronze, gold over nickel plated in contact area, tin-lead over nickel in solder area
Shield — Brass, bright tin-lead plated

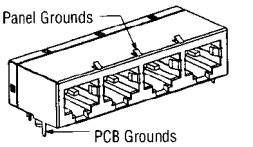
Top Entry shown without Panel Stops



Side Entry Shielded shown with Panel Grounds



Multi-Port Shielded



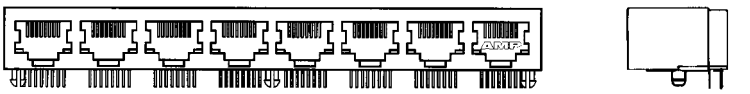
	No. of Ports	Entry		Shielded		Unshielded	
				PC Ground ONLY	Panel & PC Ground	Panel Stop	W/O Panel Stops
Single Port	1	Top	Unkeyed	—	—	—	558397-1
	1	Side	Unshielded Keyed	—	—	—	558341-1
			Shielded	558342-1	558344-1	—	—
Multi-Port	4	Side	Shielded	558503-1	558524-1	—	—
	6	Side	Shielded	558504-1	558525-1	—	—
	8	Side	Shielded	558505-1	—	—	—

Printed Circuit Board Jacks — Multi-Port

Material and Finish

Housing — Polysulfone, black, UL 94V-0 rated
Contact — .013 [0.33] thk. phosphor bronze; plated .000050 [0.00127] gold in localized area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate
Shield — .010 [0.25] copper alloy tin-lead plated

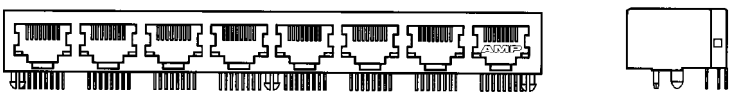
Unshielded



Description	No. of Contacts Per Port	Jack Part No.
1 Port, 8-Position, Keyed	8	557804-1
1 Port, 10-Position	10	558065-1
3 Port, 8-Position	8	557561-1

Note: On any modular jack, Terminal No. 1 is the terminal to the extreme left as you face the jack opening, tab notch down.

Shielded



Description	No. of Contacts Per Port	Standard Assembly Part No.		IR Compatible Assembly Part No.	
		PCB Gnd	PNL Gnd	PCB Gnd	PNL Gnd
1 Port, 8-Position, Shielded	8	—	557787-1	558575-1	—
1 Port, 8-Position, Shielded, Keyed	8	558310-1	—	—	—
1 Port, 10-Position, Shielded	10	558067-1	—	—	—
2 Port, 8-Position, Shielded	8	557570-1	—	—	—

Note: On any modular jack, Terminal No. 1 is the terminal to the extreme left as you face the jack opening, tab notch down.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

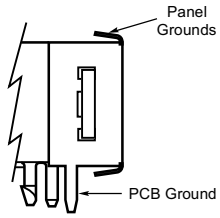
Modular Interconnection System

Miscellaneous Products (Continued)

Printed Circuit Board Jacks — Shielded, Through-Hole, Side Entry, Low Profile

6-Position

8-Position



Material and Finish

Housing — Polyester (wave solder compatible), UL 94V-0 rated
Contact — .014 [0.36] thk. phosphor bronze; plated .000050 [0.00127] gold in contact area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate

Description	Style	Contacts Loaded	Part Numbers	
			Tray Packed	Tube Loaded
6-Position Shielded Jack	PC Board Ground	6	555154-1	—
		4	555154-2	—
	Panel Ground	6	555140-1	—
		4	555140-2	—
8-Position Shielded Jack	PC Board Ground	8	—	555153-3
8-Position Shielded Jack Keyed	PC Board Ground	8	556591-1	—

Note: On any modular jack, Terminal No. 1 is the terminal to the extreme left as you face the jack opening, tab notch down.

Printed Circuit Board Jacks — Stacked Multi-Port

Material and Finish

Housing — Polysulfone, black, UL 94V-0 rated
Contact — .013 [0.33] phosphor bronze; plated .000050 [0.00127] gold in localized area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate
Shield — .010 [0.25] copper alloy tin-lead plated

Description	No. of Ports	No. of Terminals Per Port	Jack Part Numbers
2 x 1 Ports Shielded with Panel Ground	2	8	569381-1
2 x 4 Ports Shielded with Panel Ground	8	8	569262-1
2 x 6 Ports Shielded with Panel Ground	12	8	569263-1
2 x 8 Ports Shielded with Panel Ground	16	8	569264-1

Printed Circuit Board Jacks — Modular Jacks with Shorting Bar

Material and Finish

Housing — Polysulfone, black, UL 94V-0 rated
Contact — .013 [0.33] phosphor bronze; plated .000050 [0.00127] gold in localized area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate
Shield — .010 [0.25] copper alloy tin-lead plated

Description	No. of Positions	Shorting Configuration	Jack Part Number
			Shielded PCB Ground
8-Position RJ-48-X Shorting	8	1 to 4 & 2 to 5	557789-1
8-Position Token Ring Shorting	8	3 to 5 & 4 to 6	557813-1

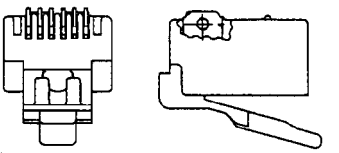
BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Modular Plugs — Standard

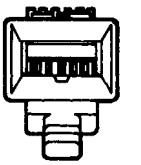
Material and Finish

Housing — Polycarbonate, UL 94V-0 rated
Terminal — .014 [0.36] thick phosphor bronze; plated .000050 [0.00127] gold in contact region, gold flash on remainder, over .000100 [0.00254] nickel underplate

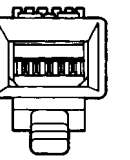
Miscellaneous Products (Continued)



6-Position Line Plug Assemblies



Flat Oval Cable

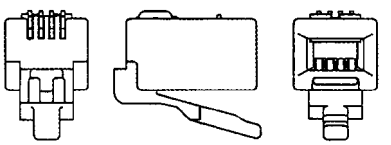


Round Cable

Description	Plug Part Numbers					
	Strip	10,000/Box	1,000/Box	500/Box	100/Box	25/Bag
2-Position Flat Oval Stranded Line	—	—	5-641333-2	—	—	—
4-Position Flat Oval Solid Line	—	—	5-556384-2	—	5-556384-3	—
4-Position Flat Oval Stranded Line	641335-1	5-641335-1	5-641335-2	—	—	5-641335-7
4-Position Round Solid Line	—	—	—	—	5-569030-3	—
4-Position Flat Oval Small Solid Conductor Line[1]	—	—	5-557965-2	—	—	—
4-Position Long Flat Oval Stranded Line	—	5-556586-1	—	—	—	—
6-Position Flat Oval Solid Line	—	—	5-555042-2	—	—	5-555042-4
6-Position Flat Oval Stranded Line	641337-1	5-641337-1	5-641337-2	—	—	5-641337-4
6-Position Round Solid Line	—	—	5-569032-2	—	—	—
6-Position Round Stranded Line	—	—	5-554710-2	—	—	5-554710-4
6-Position Flat Oval Small Solid Conductor Line[1]	—	—	5-557970-2	—	—	—
8-Position Flat Oval Solid Line	554720-1	5-554720-1	—	5-554720-2	—	5-554720-4
8-Position Flat Oval Stranded Line	554739-1	5-554739-1	—	5-554739-2	—	5-554739-4
8-Position Round Solid Line	—	—	—	—	—	5-557315-4
8-Position Round Stranded Line	—	5-554169-1	—	5-554169-2	—	5-554169-4
8-Position Small Round Cable Stranded Line	—	5-557961-1	—	5-557961-2	—	—
8-Position Small Round Cable Solid Line	—	—	—	5-569215-2	5-569215-3	—
8-Position Flat Oval Small Solid Conductor Line[1]	—	—	—	5-557972-2	5-557972-3	—
8-Position Flat Oval Small Stranded Conductor Line[1]	—	—	—	—	5-557973-3	—
8-Position Keyed Flat Oval Stranded Line	—	—	—	5-554743-2	—	—
10-Position Round Stranded Line	—	—	—	5-557963-2	5-557963-3	—

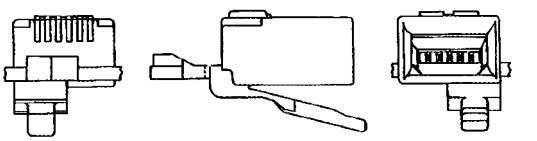
[1]Small conductor products are for .029-.034 [.737-.864] OD conductors. Small Conductor product housings are tinted blue to differentiate from Standard Product. Standard products cover .029-.039 [.737-.991] when a small conductor product does not exist.
Note: On any modular plug, Terminal No. 1 is the terminal to the extreme left as you face the cable opening, latch tab down.

Modular Plugs — 4-Position Handset



Description	Plug Part Numbers		
	Strip	1,000/Box	25/Bag
4-Position Flat Oval Stranded	641334-1	5-641334-2	5-641334-7

Modular Plugs — with Offset Latch (6-Position Plug Style Only)



Description	Plug Part Numbers		
	1,000/Box	100/Box	25/Bag
6-Position Flat Oval Solid Offset	—	5-555236-2	—
6-Position Flat Oval Stranded Offset	5-555237-1	—	5-555237-3

Note: Offset latch product conforms to FCC requirements except for latch location.

BLUE part numbers indicate 2D geometry and 3D CAD models that are included on CD-ROM.

Inverted RJ45 Modular Jacks with Integrated LEDs

Single Port

Material and Finish

Housing — High temperature Nylon UL 94V-0 rated
Contact — .013 [0.33] Phosphor bronze; plated .000050 [0.00127] gold in localized area and .000150 [0.00381] tin-lead on solder tails, over .000050 [0.00127] nickel underplate
Shield — .010 [0.25] copper alloy tin-lead plated

Miscellaneous Products (Continued)

All Plastic

Part Number 406533-1

Shielded

Part Number 406549-1

AMP 110Connect System

Snagless Boots for Modular Plugs

Color	Part Number
Black	569875-1
Almond	569875-2
Red	569875-3
Green	569875-4
Blue	569875-5
Yellow	569875-6
Orange	569875-7
White	569875-8
Violet	569875-9
Gray	1-569875-0

Cable

FUTURELAN Enhanced Cat 5, 4-Pair UTP, Unshielded, 24 AWG, Non-Plenum

Part Number 57826-5
Blue color

Tooling (Continued)

Cutting Tool Kit, 314818-1

Tool cuts AMPMODU Mod. II Breakaway Headers (Single- or Double-Row, Vertical or Right-Angle) with .025 [.64] square posts on .100 [2.54] centers. The Kit includes a Pistol Grip Ratchet Handle, a Locator, a Cutting Head (includes blades and a stored set of 2 extra blades), a Hex Wrench, and a Carrying Case.

Specifications

Width—5.1 [130]
Depth—9.0 [230]
Height—5.5 [140]
Weight—14.7 oz [417 g]

For more information, request Catalog **296501, page 45,** Instruction Sheet **408-9707** .