

SPECIFICATION FOR APPROVAL

Customer:

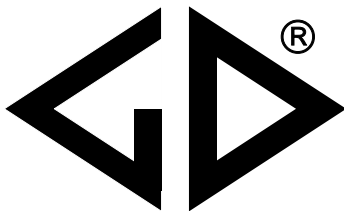
Type: Metallized polyester film capacitor (CL21)

Customer code:

Co. code:

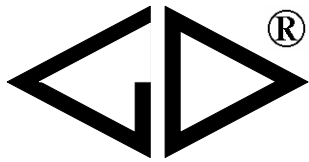
Date:

	“√”	Signed by customer	Note
Approved			
Approved conditionally			
Rejected			



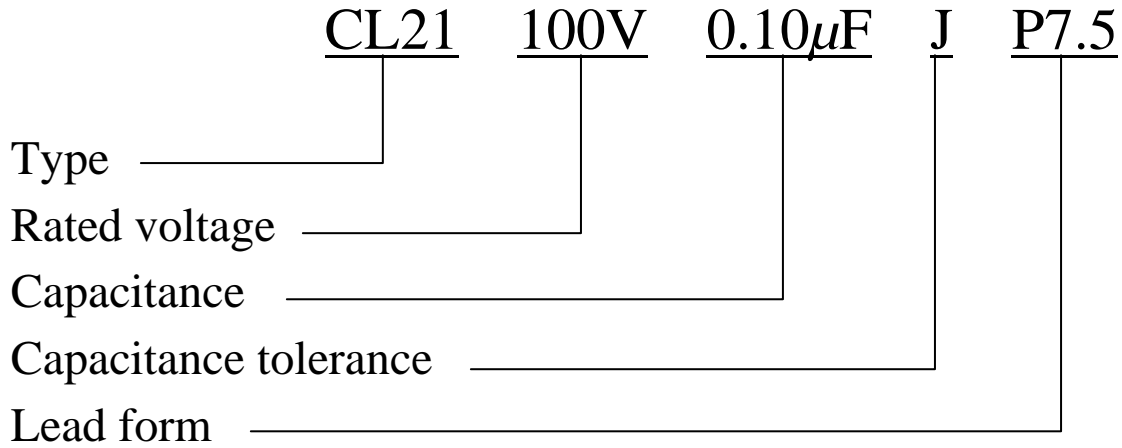
厦门法拉电子股份有限公司

XIAMEN FARATRONIC Co., Ltd.



Metallized Polyester Film Capacitor (type CL21)

Purchase Specification

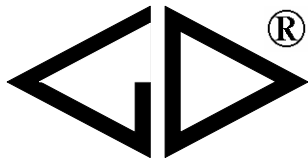


Capacitance tolerance:

Capacitance tolerance	$\pm 5\%$	$\pm 10\%$	$\pm 20\%$
Code	J	K	M

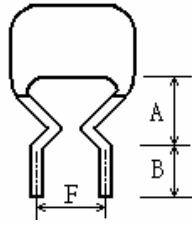
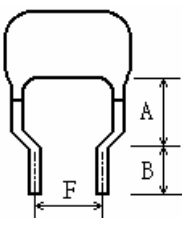
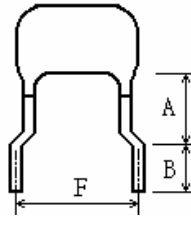
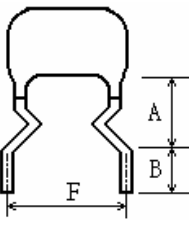
Straight lead:

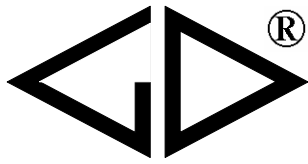
Code	P	P5.0	P7.5	P10.0	P15.0	P22.5	P27.5
Lead form	straight lead	Lead pitch 5.0mm	Lead pitch 7.5mm	Lead pitch 10.0mm	Lead pitch 15.0mm	Lead pitch 22.5mm	Lead pitch 27.5mm
Node	Pitch in common use						
Outline drawing							



Metallized Polyester Film Capacitor (type CL21)

Bent lead:

Code	F	F5.0	F7.5	F10.0	F15.0	F22.5	F27.5	
Lead form	Bent lead	Lead pitch 5.0mm	Lead pitch 7.5mm	Lead pitch 10.0mm	Lead pitch 15.0mm	Lead pitch 22.5mm	Lead pitch 27.5mm	
Note	Pitch in common use							
Code	I	II		III		IV		
Forming shape								
Applicable range	$P \geq F$			$P < F$				
	$0\text{mm} \leq P-F \leq 3\text{mm}$	$3\text{mm} < P-F \leq 8\text{mm}$		$3\text{mm} < F-P \leq 5\text{mm}$		$0\text{mm} < F-P \leq 3\text{mm}$		
Dimension standard	$A \leq 5.0\text{mm}$; $B = 4.5 \pm 0.5\text{mm}$; The permissible tolerance of 'F' is $\pm 1.0\text{mm}$							



Metallized Polyester Film Capacitor (type CL21)

1 Feature:

The capacitor is wound with polyester film as dielectric and the aluminum on the film which is evaporated on the vacuum as electrode. Radical lead, insulation dipped. It is excellent of electric property and suitable for D.C., pulsatile and impulse circuits of electronic equipment.

2 Reference standards:

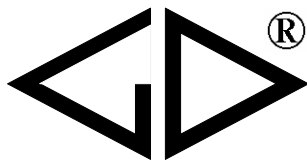
GB 2693 IEC 384-1	Fixed capacitors for use in electronic equipment Part 1:General specification
GB 7332 IEC 384-2	Fixed capacitors for use in electronic equipment Part 2:Sectional specification : Fixed metallized polyethylene- terephthalate film dielectric d.c. capacitors
GB 7333 IEC 384-2-1	Fixed capacitors for use in electronic equipment Part 2:Blank detail specification: Fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors Assessment level E
GB 7335	Detail specification for electronic components: Fixed metallized polyethylene-terephthalate film dielectric d.c. capacitors. Type CL21 Assessment level E
GB 2828	Sampling procedures and tables for lot-by-lot inspection by attributes(Apply to inspection of successive lots or batches)
GB 2829	Sampling procedures and tables for periodic inspection by attributes(Apply to inspection of stability for productive process)
IEC 410	Sampling plans and procedures for inspection by attributes

3 Dimensions: refer to table 1

4 Specification: refer to table2

5 Quality Ensuring test (before shipment):

Inspection item (each batch)	Inspection level (GB 2828)	
	IL	AQL %
1.Appearance inspection	S-4	2.5
2.Dimensions		
1.Capacitance	II	1.0
2.Tangent of the loss angle		
3.Dielectric strength		
4.Insulation resistance		
1.Solderability	S-3	2.5

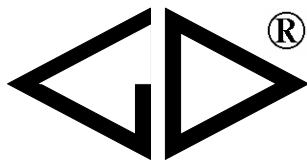


Metallized Polyester Film Capacitor (Type CL21)

Table 1: Dimensions of CL21

unit:mm

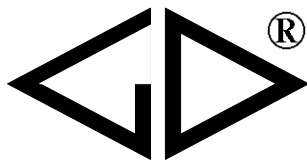
C _r	50/63/100VDC					250VDC					400VDC					630VDC				
	Wmax	Hmax	Tmax	P	d	Wmax	Hmax	Tmax	P	d	Wmax	Hmax	Tmax	P	d	Wmax	Hmax	Tmax	P	d
0.010																13.5	10.5	6.0	10.0	0.6
0.012																13.5	10.5	6.0	10.0	0.6
0.015																13.5	11.0	6.5	10.0	0.6
0.018																13.5	11.5	7.0	10.0	0.6
0.022											13.5	10.0	6.0	10.0	0.6	13.5	12.0	7.5	10.0	0.6
0.027											13.5	10.0	6.5	10.0	0.6	13.5	12.0	8.0	10.0	0.6
0.033											13.5	10.5	7.0	10.0	0.6	13.5	12.5	8.5	10.0	0.6
0.039											13.5	11.5	7.0	10.0	0.6	13.5	13.0	9.0	10.0	0.6
0.047											13.5	12.0	7.5	10.0	0.6	17.5	14.0	8.5	12.5	0.6
0.056											13.5	12.5	8.0	10.0	0.6	17.5	14.5	9.0	12.5	0.6
0.068						11.5	10.0	6.5	7.5	0.6	13.5	13.0	8.5	10.0	0.6	17.5	14.5	10.0	12.5	0.6
0.082						11.5	11.0	6.5	7.5	0.6	13.5	13.5	9.5	10.0	0.6	17.5	15.5	10.5	12.5	0.6
0.10	11.5	10.0	6.5	7.5	0.6	13.5	10.5	6.5	10.0	0.6	19.0	12.0	8.0	15.0	0.6	24.5	14.0	9.0	20.0	0.8
0.12	11.5	10.5	7.0	7.5	0.6	13.5	11.0	6.5	10.0	0.6	19.0	13.0	8.0	15.0	0.6	24.5	14.5	9.5	20.0	0.8
0.15	11.5	11.0	7.5	7.5	0.6	13.5	11.5	7.0	10.0	0.6	19.0	14.0	8.5	15.0	0.6	24.5	15.5	10.5	20.0	0.8
0.18	11.5	12.0	7.5	7.5	0.6	13.5	12.5	7.5	10.0	0.6	19.0	14.5	9.0	15.0	0.6	24.5	17.5	10.5	20.0	0.8
0.22	13.5	11.5	7.0	10.0	0.6	19.0	12.5	7.0	15.0	0.6	19.0	15.0	10.0	15.0	0.6	24.5	18.0	11.5	20.0	0.8
0.27	13.5	12.5	7.0	10.0	0.6	19.0	13.0	7.5	15.0	0.6	19.0	17.0	10.0	15.0	0.6	24.5	19.0	12.5	20.0	0.8
0.33	13.5	13.0	8.0	10.0	0.6	19.0	13.5	8.0	15.0	0.6	24.5	16.5	9.5	20.0	0.8	24.5	20.5	13.5	20.0	0.8
0.39	13.5	13.5	8.5	10.0	0.6	19.0	14.0	8.5	15.0	0.6	24.5	17.0	10.5	20.0	0.8	24.5	22.5	14.0	20.0	0.8
0.47	13.5	14.0	9.0	10.0	0.6	19.0	14.5	9.5	15.0	0.8	24.5	18.0	11.0	20.0	0.8	34.0	20.5	12.5	30.0	0.8
0.56	13.5	15.0	9.5	10.0	0.6	19.0	15.0	10.0	15.0	0.8	24.5	19.0	12.0	20.0	0.8	34.0	21.5	13.5	30.0	0.8
0.68	19.0	14.0	8.5	15.0	0.6	19.0	16.0	10.5	15.0	0.8	24.5	20.0	13.0	20.0	0.8	34.0	23.0	14.5	30.0	0.8
0.82	19.0	14.5	9.5	15.0	0.6	19.0	17.5	11.0	15.0	0.8	24.5	21.0	14.0	20.0	0.8	34.0	24.5	16.0	30.0	0.8
1.0	19.0	15.5	10.0	15.0	0.8	24.5	17.0	10.0	20.0	0.8	34.0	20.0	12.0	30.0	0.8	39.5	24.0	16.0	35.0	0.8
1.2	19.0	16.0	11.0	15.0	0.8	24.5	18.5	10.5	20.0	0.8	34.0	21.0	13.0	30.0	0.8	39.5	25.5	17.5	35.0	0.8
1.5	19.0	17.0	11.5	15.0	0.8	24.5	19.5	11.5	20.0	0.8	34.0	22.5	14.0	30.0	0.8	39.5	27.5	19.5	35.0	0.8
1.8	19.0	18.5	12.0	15.0	0.8	24.5	20.5	12.5	20.0	0.8	34.0	24.0	15.5	30.0	0.8	39.5	29.5	21.0	35.0	0.8
2.2	24.5	18.5	11.5	20.0	0.8	24.5	22.0	13.5	20.0	0.8	39.5	24.0	15.5	35.0	0.8	39.5	31.5	23.5	35.0	0.8
2.7	24.5	19.5	12.5	20.0	0.8	24.5	23.0	15.0	20.0	0.8	39.5	25.5	17.0	35.0	0.8					
3.3	24.5	20.5	14.0	20.0	0.8	34.0	21.5	13.0	30.0	0.8	39.5	27.0	18.5	35.0	0.8					
3.9	24.5	21.5	15.0	20.0	0.8	34.0	22.5	14.5	30.0	0.8	39.5	28.5	20.5	35.0	0.8					
4.7	34.0	20.0	13.0	30.0	0.8	34.0	24.0	15.5	30.0	0.8	39.5	30.5	22.5	35.0	0.8					
5.6	34.0	21.0	14.0	30.0	0.8	34.0	25.5	17.0	30.0	0.8										
6.8	34.0	22.5	15.5	30.0	0.8	34.0	27.0	18.5	30.0	0.8										
8.2	34.0	23.5	17.0	30.0	0.8	34.0	29.0	20.5	30.0	0.8										
10.0	34.0	25.5	18.0	30.0	0.8	34.0	31.0	22.5	30.0	0.8										



Metallized Polyester Film Capacitor (Type CL21)

Table 1: Dimensions of CL21-II
unit:mm

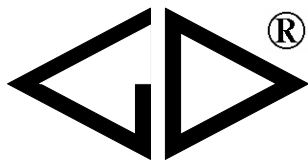
C _R	50/63/100VDC					250VDC					400VDC					630VDC				
	W _{max}	H _{max}	T _{max}	P	d	W _{max}	H _{max}	T _{max}	P	d	W _{max}	H _{max}	T _{max}	P	d	W _{max}	H _{max}	T _{max}	P	d
103	11.0	9.5	5.5	7.5	0.6	11.0	9.5	5.5	7.5	0.6	11.0	9.5	5.5	7.5	0.6	13.0	9.0	5.0	10.0	0.6
123	11.0	10.0	6.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	13.0	9.0	5.0	10.0	0.6
153	11.0	10.0	6.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	13.0	9.5	5.5	10.0	0.6
183	11.0	10.5	6.5	7.5	0.6	11.0	10.5	6.5	7.5	0.6	11.0	10.5	6.5	7.5	0.6	13.0	10.0	6.0	10.0	0.6
223	11.0	9.5	5.5	7.5	0.6	11.0	9.5	5.5	7.5	0.6	11.0	9.5	5.5	7.5	0.6	13.0	10.0	6.0	10.0	0.6
273	11.0	10.0	5.5	7.5	0.6	11.0	10.0	6.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	13.0	10.5	6.5	10.0	0.6
333	11.0	9.0	5.0	7.5	0.6	11.0	9.0	5.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	13.0	11.0	7.0	10.0	0.6
393	11.0	9.5	5.0	7.5	0.6	11.0	9.5	5.0	7.5	0.6	11.0	10.5	6.5	7.5	0.6	13.0	11.5	7.0	10.0	0.6
473	11.0	9.5	5.5	7.5	0.6	11.0	9.5	5.5	7.5	0.6	11.0	11.0	7.0	7.5	0.6	17.0	12.0	7.0	12.5	0.6
563	11.0	10.0	5.5	7.5	0.6	11.0	10.0	6.0	7.5	0.6	13.0	11.0	6.0	10.0	0.6	17.0	12.5	7.5	12.5	0.6
683	11.0	9.5	5.5	7.5	0.6	11.0	9.5	5.5	7.5	0.6	13.0	11.5	6.5	10.0	0.6	17.0	13.0	8.0	12.5	0.6
823	11.0	9.5	6.0	7.5	0.6	11.0	9.5	6.0	7.5	0.6	13.0	12.0	7.0	10.0	0.6	17.0	13.5	8.5	12.5	0.6
104	11.0	9.0	5.0	7.5	0.6	11.0	10.0	6.0	7.5	0.6	13.0	12.0	7.0	10.0	0.6	19.0	14.0	8.0	15.0	0.8
124	11.0	9.0	5.0	7.5	0.6	11.0	10.5	6.5	7.5	0.6	13.0	13.0	8.0	10.0	0.6	19.0	14.5	9.0	15.0	0.8
154	11.0	9.0	5.0	7.5	0.6	11.0	11.0	7.0	7.5	0.6	19.0	12.0	7.5	15.0	0.6	19.0	15.0	9.5	15.0	0.8
184	11.0	9.5	5.5	7.5	0.6	13.0	11.0	6.0	10.0	0.6	19.0	13.0	8.0	15.0	0.6	19.0	16.0	10.0	15.0	0.8
224	11.0	10.0	6.0	7.5	0.6	13.0	11.5	6.5	10.0	0.6	19.0	14.0	8.0	15.0	0.6	19.0	17.0	11.0	15.0	0.8
274	11.0	10.0	6.0	7.5	0.6	13.0	12.0	7.0	10.0	0.6	19.0	14.5	9.0	15.0	0.6	24.0	17.0	10.0	20.0	0.8
334	13.0	10.5	6.0	10.0	0.6	13.0	13.0	7.0	10.0	0.6	19.0	15.0	9.5	15.0	0.8	24.0	18.0	10.5	20.0	0.8
394	13.0	11.0	6.0	10.0	0.6	19.0	12.5	6.5	15.0	0.6	19.0	16.0	10.0	15.0	0.8	24.0	19.0	11.5	20.0	0.8
474	13.0	11.5	6.5	10.0	0.6	19.0	13.0	7.0	15.0	0.8	19.0	17.0	11.0	15.0	0.8	29.0	19.0	10.5	25.0	0.8
564	13.0	12.0	7.0	10.0	0.6	19.0	13.0	7.5	15.0	0.8	24.0	16.0	10.0	20.0	0.8	29.0	20.0	11.0	25.0	0.8
684	19.0	12.0	6.5	15.0	0.6	19.0	14.0	8.0	15.0	0.8	24.0	17.0	11.0	20.0	0.8	29.0	21.0	12.5	25.0	0.8
824	19.0	13.0	7.0	15.0	0.6	19.0	14.5	9.0	15.0	0.8	24.0	18.0	12.0	20.0	0.8	29.0	22.5	13.5	25.0	0.8
105	19.0	13.0	7.5	15.0	0.8	19.0	15.0	9.5	15.0	0.8	29.0	18.0	11.0	25.0	0.8	34.0	22.5	13.5	30.0	0.8
125	19.0	14.0	8.0	15.0	0.8	24.0	14.5	9.0	20.0	0.8	29.0	19.0	12.0	25.0	0.8	34.0	23.5	15.0	30.0	0.8
155	19.0	14.5	9.0	15.0	0.8	24.0	15.0	9.5	20.0	0.8	29.0	20.5	13.0	25.0	0.8	34.0	25.0	16.0	30.0	0.8
185	19.0	15.0	9.5	15.0	0.8	24.0	17.0	10.0	20.0	0.8	34.0	21.0	12.5	30.0	0.8	34.0	27.0	18.0	30.0	0.8
225	24.0	15.5	8.5	20.0	0.8	24.0	18.0	10.5	20.0	0.8	34.0	22.5	14.0	30.0	0.8	34.0	28.5	20.0	30.0	0.8
275	24.0	16.0	9.0	20.0	0.8	24.0	19.0	12.0	20.0	0.8	34.0	24.0	15.0	30.0	0.8					
335	24.0	17.0	10.0	20.0	0.8	29.0	19.0	11.5	25.0	0.8	34.0	25.5	17.0	30.0	0.8					
395	24.0	18.0	10.5	20.0	0.8	29.0	19.5	12.0	25.0	0.8	34.0	27.0	18.0	30.0	0.8					
475	29.0	18.0	10.5	25.0	0.8	29.0	21.0	13.5	25.0	0.8	34.0	29.0	20.0	30.0	0.8					
565	29.0	18.5	11.0	25.0	0.8	34.0	20.5	13.0	30.0	0.8										
685	29.0	19.5	12.0	25.0	0.8	34.0	22.5	14.0	30.0	0.8										
825	29.0	20.5	13.0	25.0	0.8	34.0	24.0	15.0	30.0	0.8										
106	29.0	22.0	14.5	25.0	0.8	34.0	25.5	16.5	30.0	0.8										



Metallized Polyester Film Capacitor (Type CL21)

**Table 2:
Specification (CL21)**

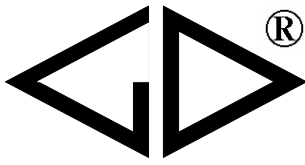
NO.	Item	Specification	Testing (GB 7332)
1	Operating temperature range	-55°C ~ +85°C	
2	Rated voltage U_R	50/63/100/160,250,400,630(V)	
3	Capacitance	0.01 μ F ~ 10.0 μ F	
4	Capacitance tolerance	J(\pm 5%), K(\pm 10%), M(\pm 20%)	Ref. item 4.2.2 1kHz, \leq 3% U_R (Vrms) or 5Vrms (whichever is the smaller)
5	Tangent of the loss angle	$C \leq 1.0\mu$ F, $tg\delta \leq 0.008$ $C > 1.0\mu$ F, $tg\delta \leq 0.010$	Ref. item 4.2.3 1kHz, \leq 3% U_R (Vrms) or 5Vrms (whichever is the smaller)
6	Dielectric strength	There shall be no breakdown or flashover.	Ref. item 4.2.1 1.6 U_R , 5s
7	Insulation resistance	$U_R \leq 100V$, $C \leq 0.33\mu$ F, $\geq 15\ 000M\Omega$ $C > 0.33\mu$ F, $\geq 5\ 000s$ $U_R > 100V$, $C \leq 0.33\mu$ F, $\geq 30\ 000M\Omega$ $C > 0.33\mu$ F, $\geq 10\ 000s$	Ref. item 4.2.4 $U_R < 100V$, Charging voltage 10V $U_R \geq 100V$, Charging voltage 100V 20°C, measuring after applying voltage for 1 minute
8	Solderability	Good quality of tinning	Ref. item 4.5 Solder bath method Ta, method 1 Solder temperature: 235 \pm 5°C Immersion time: 2.0 \pm 0.5s
9	Initial measurement	Capacitance $tg\delta$: 1kHz, $C > 1.0\mu$ F 10kHz, $C \leq 1.0\mu$ F	
	Terminal strength	There shall be no visible damage	Ref. item 4.3 Tension (Test Ua1): 10N Bend (Test Ub): 5N The terminals shall be bent 2 times in each direction.
	Resistance to soldering heat	There shall be no visible damage and the marking shall be legible.	Ref. item 4.4 Solder bath method Tb, method 1A 260 \pm 5°C, 10 \pm 1s
	Final measurement	$\Delta C/C \leq \pm 2\%$ (relative to the initial value) Increase of $tg\delta$: ≤ 0.005 (10kHz, $C \leq 1.0\mu$ F) ≤ 0.003 (1kHz, $C > 1.0\mu$ F)	



Metallized Polyester Film Capacitor (Type CL21)

**Table 2(continued):
Specification (CL21)**

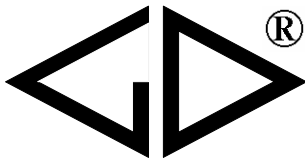
NO.	Item	Specification	Testing (GB 7332)
10	Initial measurement	Capacitance tgδ: 1kHz, C>1.0μF 10kHz, C≤1.0μF	
	Rapid change of temperature	There shall be no visible damage	Ref. item 4.6 θ _A =-55°C, θ _B =+85°C 5 cycles, Duration: t=30min
	Vibration	There shall be no visible damage	Ref. item 4.7 Amplitude 0.75mm or acceleration 98 m/s ² (whichever is the smaller severity), f: 10~500Hz. Three directions, 2h for each direction, total 6h.
	Bump	There shall be no visible damage	Ref. item 4.8 4 000 times, Acceleration:390m/s ² , Pulse duration: 6ms
	Final measurement	ΔC/C ≤±5%(relative to the initial value) Increase of tgδ: ≤0.005 (10kHz, C≤1.0μF) ≤0.003 (1kHz, C>1.0μF) I.R.: ≥ 50% of the rated value (No.7)	
11	climate sequence	Initial measurement	Capacitance tgδ: 1kHz, C>1.0μF 10kHz, C≤1.0μF
		Dry heat	Ref. item 4.10.2 +85°C, 16h
		Damp heat, cyclic	Ref. item 4.10.3 Test Db, Severity b, the first cycle
		Cold	Ref. item 4.10.4 -55°C, 2h
		Low air pressure	There shall be no permanent breakdown, flashover or other harmful deformation when applying U _R in the last 5 minute Ref. item 4.10.5 15~35°C, 8.5kPa, 1h
		Damp heat, cyclic	Applying U _R for 1 minute after the test finished Ref. item 4.10.6 Test Db, Severity b, the other cycles
		Final measurement	There shall be no visible damage and the marking shall be legible ΔC/C ≤ ±5%(relative to the initial value) Increase of tgδ: ≤0.008(10kHz, C≤1.0μF) ≤0.005 (1kHz, C>1.0μF) I.R.: ≥50% of the rated value(No.7)



Metallized Polyester Film Capacitor (Type CL21)

**Table 2(continued):
Specification (CL21)**

NO.	Item	Specification	Testing (GB 7332)
12	Damp heat Steady state	There shall be no visible damage and the marking shall be legible. $\Delta C/C \leq \pm 5\%$ (relative to the initial value) $\text{tg}\delta$ (1kHz): Increase of $\text{tg}\delta \leq 0.005$ I.R.: $\geq 50\%$ of the rated value(No.7)	Ref. item 4.11 Temperature: $40 \pm 2^\circ\text{C}$ Humidity: $93_{-3}^{+2}\% \text{RH}$ Duration: 21 days
13	Endurance	There shall be no visible damage and the marking shall be legible $\Delta C/C \leq \pm 8\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.005 (10kHz, $C \leq 1.0\mu\text{F}$) ≤ 0.003 (1kHz, $C > 1.0\mu\text{F}$) I.R.: $\geq 50\%$ of the rated value(No.7)	Ref. item 4.12 $+85^\circ\text{C}, 1\ 000\text{h}$ $1.25U_R$
14	Charging and discharging	$\Delta C/C \leq \pm 5\%$ (relative to the initial value) Increase of $\text{tg}\delta$: ≤ 0.005 (10kHz, $C \leq 1.0\mu\text{F}$) ≤ 0.003 (1kHz, $C > 1.0\mu\text{F}$) I.R.: $\geq 50\%$ of the rated value(No.7)	Ref. item 4.13 Times: 10 000 Duration of charging: 0.5s Duration of discharging: 0.5s Charging voltage: rated voltage Charging resistance: $220/C_R(\Omega)$ Discharging resistance: $R = 10/C_R(\Omega)$ or 20Ω (whichever is the greater) C_R : rated capacitance (μF)

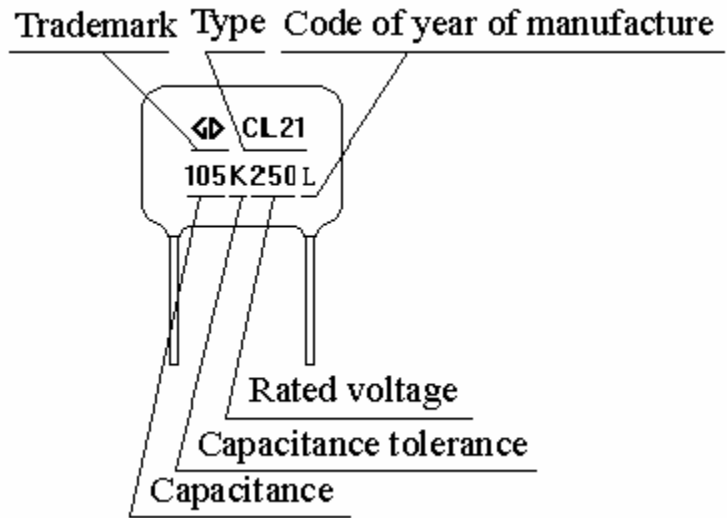
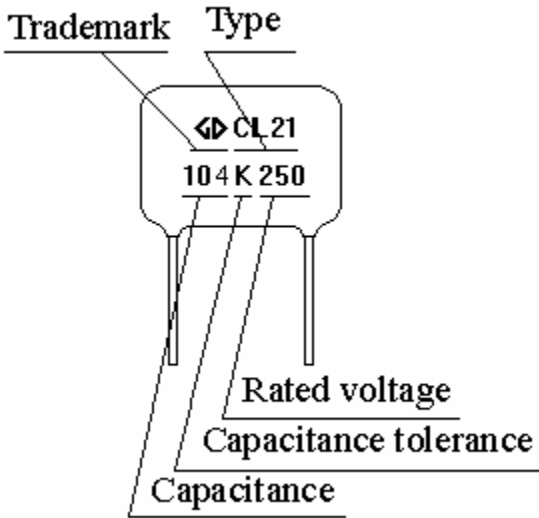


Metallized Polyester Film Capacitor (Type CL21)

6 Marking:

For small size ($P \leq 10.0\text{mm}$)

For large size ($P > 10.0\text{mm}$)



Means of the rated capacitance mark:

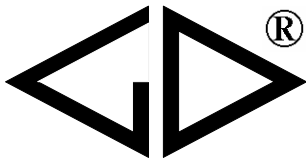
Mark	102	103	104	224	105
uF	0.001	0.01	0.1	0.22	1.0

7 Packing and shipment:

7.1 A certain quantity of capacitors and the qualified bill shall be packed with a plastic bag . Then put several plastic bags into one small packing box, sealed with adhesive paper. One big packing box contains four small packing box. Packing with small or big box depends on the customer's purchase quantity.

7.2 The dimensions of packing boxes refer to the drawing in the next page.

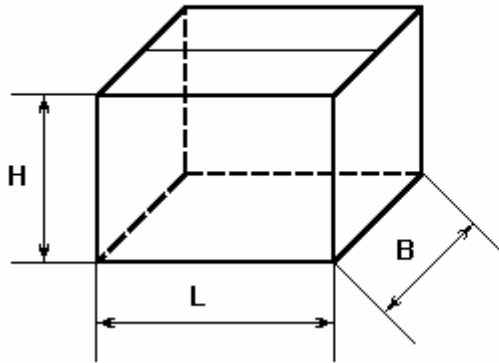
7.3 For the packing box with capacitors, all kinds of shipments are permitted, but the sprinkle of rain or snow and mechanical damage must be avoided.



Metallized Polyester Film Capacitor (Type CL21)

Big packing box dimension drawing

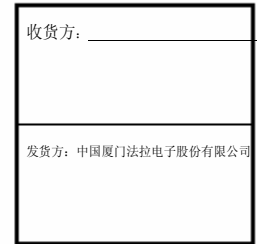
L: 377mm B: 377mm H: 267mm



Plane Drawing

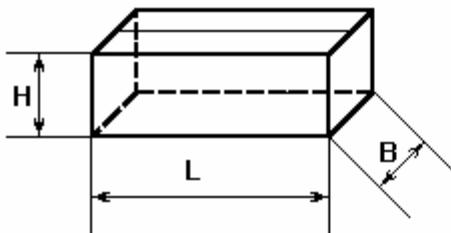


Overlook Drawing

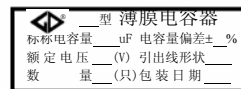


Small packing box dimension drawing:

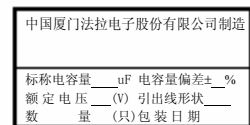
L: 353mm B: 175mm H: 118mm



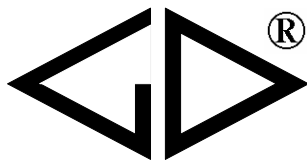
Plane Drawing



Overlook Drawing

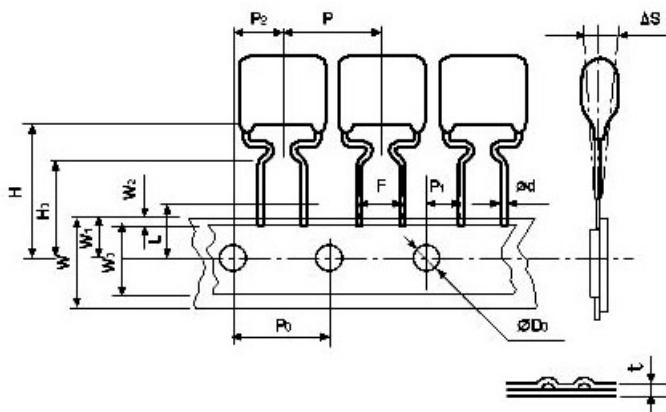


8 Specification of radial taping dipped capacitors Refer to the next page



Metallized Polyester Film Capacitor (Type CL21)

8.1 Taping outline



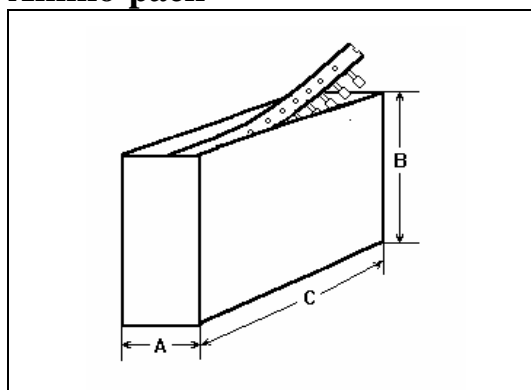
8.2 Taping dimensions (mm) and packing quantity

Item	Code	Dimensions	Tolerance
Taping pitch	P	12.7	±1.0
Feed hole pitch	P ₀	12.7	±0.3
Taping pitch	P ₁	3.85	±0.7
Feed hole pitch	P ₂	6.35	±1.3
Pitch of taping wire	F	5.0	+0.8 -0.2
Hole position	W ₁	9.0	+0.75 -0.50
Height of component from tape center	H	20.0	±1.0
Height of crangle from tape center	H ₀	16.0	±0.5
Feed hole dia.	D ₀	Φ4.0	±0.3
Tape thickness	t	0.7	±0.2
Component alignment	△S	0	±2.0
Hold down tape width	W ₀	13.0	±0.5
Cutting position	L	≤11.0	
Hold down tape position	W ₂	0~3.0	
Carrier tape width	W	18.0	+1.0 -0.5

Type	Rated voltage	Capacitance Range
CL11	50V	0.0010 μF~0.22 μF
	60/100V	0.0010 μF~0.10 μF
	160V	0.0010 μF~0.047 μF
	250V	0.0010 μF~0.033 μF
	400V	0.0010 μF~0.022 μF
	1 000/1 200V	0.0010 μF~0.010 μF
CL12	50/63/100V	0.0010 μF~0.047 μF
CL21X	50/63V	0.0010 μF~1.0 μF
	100V	0.0010 μF~1.0 μF
CL21-II	50/63/100V	0.010 μF~0.27 μF
	250V	0.010 μF~0.15 μF
	400V	0.010 μF~0.047 μF
CBB13	100V	0.0010 μF~0.012 μF
	160V	0.0010 μF~0.0047 μF
CBB11	63/100V	0.00068~0.1 μF
CBB21	100~630V	P=7.5

8.3 Dimensions of taping packing

Ammo-pack



Code	Size(mm)
A	52±3
B	260±3
C	335±3