

# KXG Series

- For electronic ballast circuits and other long life applications
- Endurance with ripple current : 8,000 to 10,000 hours at 105°C
- Non solvent resistant type
- RoHS2 Compliant

KXJ P5-53  
↓  
Downsized  
**KXG**

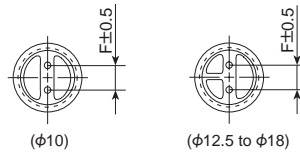
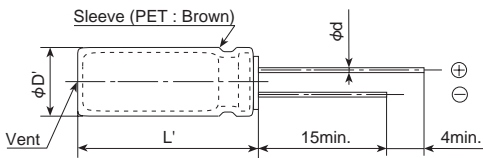


## ◆ SPECIFICATIONS

Items	Characteristics			
<b>Category</b>	-40 to +105°C (160 to 400V <sub>dc</sub> ) -25 to +105°C (450V <sub>dc</sub> )			
<b>Temperature Range</b>				
<b>Rated Voltage Range</b>	160 to 450V <sub>dc</sub>			
<b>Capacitance Tolerance</b>	±20% (M) (at 20°C, 120Hz)			
<b>Leakage Current</b>		After 1 minute	After 5 minutes	
	CV ≤ 1,000	I = 0.1CV + 40	I = 0.03CV + 15	
	CV > 1,000	I = 0.04CV + 100	I = 0.02CV + 25	
	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C)			
<b>Dissipation Factor (tan δ)</b>	Rated voltage (V <sub>dc</sub> )	160 to 250V	350 to 450V	
	tan δ (Max.)	0.20	0.24	(at 20°C, 120Hz)
<b>Low Temperature Characteristics (Max. Impedance Ratio)</b>	Rated voltage (V <sub>dc</sub> )	160 to 250V	350 & 400V	450V
	Z(-25°C)/Z(+20°C)	3	5	6
	Z(-40°C)/Z(+20°C)	6	6	—
	(at 120Hz)			
<b>Endurance</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 10,000 hours (8,000 hours for φ10) at 105°C.			
	Capacitance change	≤ ±20% of the initial value		
	D.F. (tan δ)	≤ 200% of the initial specified value		
	Leakage current	≤ The initial specified value		
<b>Shelf Life</b>	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4.			
	Capacitance change	≤ ±20% of the initial value		
	D.F. (tan δ)	≤ 200% of the initial specified value		
	Leakage current	≤ 500% of the initial specified value		

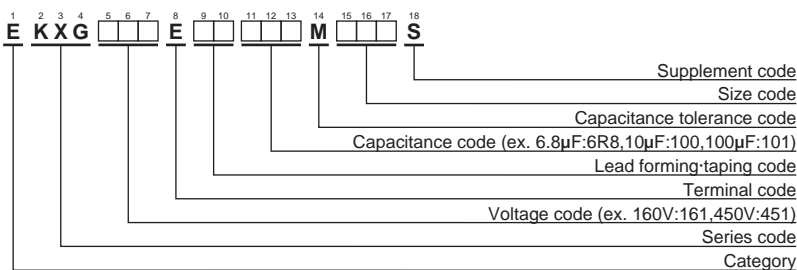
## ◆ DIMENSIONS [mm]

- Terminal Code : E



φD	10	12.5	16	18
φd	0.6	0.6	0.8	0.8
F	5.0	5.0	7.5	7.5
φD'	φD+0.5max.			
L'	L+1.5max.			

## ◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (radial lead type)"

## ◆ RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance(μF)	Frequency(Hz)			
	120	1k	10k	100k
6.8 to 82	1.00	1.75	2.25	2.50
100 to 330	1.00	1.67	2.05	2.25

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced.

**KXG Series**
**◆STANDARD RATINGS**

VV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current(mArms/105°C)		Part No.
				120Hz	100kHz	
160	10	10 × 16	0.20	125	315	EKXG161E□□100MJ16S
	22	10 × 20	0.20	200	500	EKXG161E□□220MJ20S
	33	10 × 20	0.20	250	625	EKXG161E□□330MJ20S
	47	10 × 20	0.20	300	750	EKXG161E□□470MJ20S
	68	12.5 × 20	0.20	470	1,175	EKXG161E□□680MK20S
	82	12.5 × 20	0.20	510	1,275	EKXG161E□□820MK20S
	100	12.5 × 25	0.20	620	1,395	EKXG161E□□101MK25S
	100	16 × 20	0.20	630	1,420	EKXG161E□□101ML20S
	150	16 × 20	0.20	770	1,735	EKXG161E□□151ML20S
200	10	10 × 16	0.20	125	315	EKXG201E□□100MJ16S
	22	10 × 20	0.20	200	500	EKXG201E□□220MJ20S
	33	10 × 20	0.20	260	650	EKXG201E□□330MJ20S
	47	12.5 × 20	0.20	390	975	EKXG201E□□470MK20S
	68	12.5 × 20	0.20	470	1,175	EKXG201E□□680MK20S
	82	16 × 20	0.20	550	1,375	EKXG201E□□820ML20S
	100	16 × 20	0.20	630	1,420	EKXG201E□□101ML20S
	150	16 × 25	0.20	840	1,890	EKXG201E□□151ML25S
	220	18 × 25	0.20	1,050	2,365	EKXG201E□□221MM25S
250	10	10 × 20	0.20	140	350	EKXG251E□□100MJ20S
	22	10 × 20	0.20	200	500	EKXG251E□□220MJ20S
	33	12.5 × 20	0.20	320	800	EKXG251E□□330MK20S
	47	12.5 × 20	0.20	390	975	EKXG251E□□470MK20S
	68	16 × 20	0.20	520	1,300	EKXG251E□□680ML20S
	82	16 × 20	0.20	550	1,375	EKXG251E□□820ML20S
	100	16 × 25	0.20	680	1,530	EKXG251E□□101ML25S
	150	18 × 25	0.20	860	1,935	EKXG251E□□151MM25S
	220	18 × 31.5	0.20	1,130	2,545	EKXG251E□□221MMN3S
350	6.8	10 × 16	0.24	110	275	EKXG351E□□6R8MJ16S
	10	10 × 20	0.24	140	350	EKXG351E□□100MJ20S
	22	12.5 × 20	0.24	260	650	EKXG351E□□220MK20S
	33	16 × 20	0.24	360	900	EKXG351E□□330ML20S
	47	16 × 20	0.24	430	1,075	EKXG351E□□470ML20S
	68	16 × 25	0.24	560	1,400	EKXG351E□□680ML25S
	68	18 × 20	0.24	550	1,375	EKXG351E□□680MM20S
	82	18 × 25	0.24	610	1,525	EKXG351E□□820MM25S
	100	18 × 25	0.24	700	1,575	EKXG351E□□101MM25S
400	6.8	10 × 16	0.24	110	275	EKXG401E□□6R8MJ16S
	10	10 × 20	0.24	140	350	EKXG401E□□100MJ20S
	15	12.5 × 20	0.24	220	550	EKXG401E□□150MK20S
	22	12.5 × 20	0.24	260	650	EKXG401E□□220MK20S
	33	16 × 20	0.24	360	900	EKXG401E□□330ML20S
	47	16 × 25	0.24	470	1,175	EKXG401E□□470ML25S
	47	18 × 20	0.24	450	1,125	EKXG401E□□470MM20S
	68	18 × 25	0.24	585	1,465	EKXG401E□□680MM25S
	82	18 × 25	0.24	610	1,525	EKXG401E□□820MM25S
450	6.8	10 × 20	0.24	110	275	EKXG451E□□6R8MJ20S
	10	12.5 × 20	0.24	180	450	EKXG451E□□100MK20S
	15	12.5 × 25	0.24	240	600	EKXG451E□□150MK25S
	22	16 × 20	0.24	290	725	EKXG451E□□220ML20S
	33	16 × 25	0.24	390	975	EKXG451E□□330ML25S
	33	18 × 20	0.24	380	950	EKXG451E□□330MM20S
	47	18 × 25	0.24	480	1,200	EKXG451E□□470MM25S
	68	18 × 31.5	0.24	630	1,575	EKXG451E□□680MMN3S
	82	18 × 35.5	0.24	715	1,785	EKXG451E□□820MMP1S
100	18 × 40	0.24	800	1,800	EKXG451E□□101MM40S	

□□ : Enter the appropriate lead forming or taping code.