

# KLJ Series

- Doesn't spark with DC over voltage
- Endurance with ripple current : 2,000 hours at 105°C
- Non solvent resistant type
- ESR value prescribed
- RoHS Compliant

KLJ

↓ Downsized

KLG

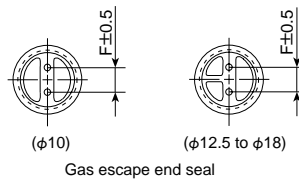
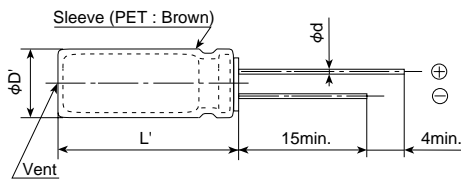


## ◆ SPECIFICATIONS

Items	Characteristics		
Category	-25 to +105°C		
Temperature Range			
Rated Voltage Range	200 & 400V <sub>dc</sub>		
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)		
Leakage Current	I = 0.04CV + 100 Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 1 minute)		
Dissipation Factor (tanδ)	Rated voltage (V <sub>dc</sub> )	200V	400V
	tanδ (Max.)	0.20	0.24
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	200V	400V
	Z(-25°C)/Z(+20°C)	4	6
Endurance	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 for 2,000 hours at 105°C.		
	Capacitance change	≤ ±20% of the initial value	
	D.F. (tanδ)	≤ 200% of the initial specified value	
	Leakage current	≤ The initial specified value	
Shelf Life	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. (tanδ)	≤ 200% of the initial specified value	
	Leakage current	≤ 500% of the initial specified value	

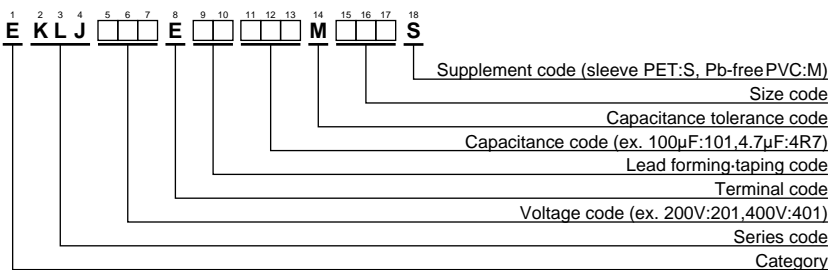
## ◆ DIMENSIONS [mm]

- 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)"

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φDXL(mm)	tanδ	ESR (Ω <sub>max</sub> /20°C, 100kHz)	Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz)	Part No.
200	33	10×20	0.20	1.8	165	EKLJ201E□□330MJ20S
	39	10×25	0.20	1.4	200	EKLJ201E□□390MJ25S
	56	12.5×20	0.20	1.0	265	EKLJ201E□□560MK20S
	82	12.5×25	0.20	0.72	350	EKLJ201E□□820MK25S
	100	16×20	0.20	0.63	390	EKLJ201E□□101ML20S
	120	16×25	0.20	0.44	465	EKLJ201E□□121ML25S
	150	18×20	0.20	0.31	505	EKLJ201E□□151MM20S
	180	16×31.5	0.20	0.36	615	EKLJ201E□□181MLN3S
	180	18×25	0.20	0.30	585	EKLJ201E□□181MM25S
	220	16×35.5	0.20	0.30	695	EKLJ201E□□221MLP1S
	220	18×31.5	0.20	0.28	700	EKLJ201E□□221MMN3S
270	18×35.5	0.20	0.24	805	EKLJ201E□□271MMP1S	
330	18×40	0.20	0.21	900	EKLJ201E□□331MM40S	
400	4.7	10×12.5	0.24	8.4	36	EKLJ401E□□4R7MJC5S
	10	10×16	0.24	5.7	64	EKLJ401E□□100MJ16S
	15	10×20	0.24	4.0	105	EKLJ401E□□150MJ20S
	18	10×25	0.24	3.2	110	EKLJ401E□□180MJ25S
	22	12.5×20	0.24	2.7	165	EKLJ401E□□220MK20S
	27	12.5×25	0.24	1.9	200	EKLJ401E□□270MK25S
	33	16×20	0.24	1.5	225	EKLJ401E□□330ML20S
	39	18×20	0.24	1.2	255	EKLJ401E□□390MM20S
	39	18×25	0.24	0.72	270	EKLJ401E□□390MM25S
	47	16×25	0.24	1.1	290	EKLJ401E□□470ML25S
	47	18×20	0.24	1.2	280	EKLJ401E□□470MM20S
	56	16×31.5	0.24	0.84	340	EKLJ401E□□560MLN3S
	68	16×35.5	0.24	0.72	385	EKLJ401E□□680MLP1S
	68	18×25	0.24	0.88	360	EKLJ401E□□680MM25S
	82	16×40	0.24	0.65	435	EKLJ401E□□820ML40S
	82	18×31.5	0.24	0.64	425	EKLJ401E□□820MMN3S
	100	18×35.5	0.24	0.54	490	EKLJ401E□□101MMP1S
120	18×40	0.24	0.49	540	EKLJ401E□□121MM40S	

□□ : Enter the appropriate lead forming or taping code.  
Sleeve PET : suffix is S, Pb-free PVC : suffix is M

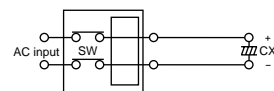
◆DC OVERVOLTAGE TEST CONDITIONS

The vent will operate and the capacitor shall become an open circuit without burning materials when the following excess DC voltage is applied.

●Test DC voltage

Rated voltage	Current limit	Test DC voltage
200V <sub>dc</sub>	4A	300/375V <sub>dc</sub>
400V <sub>dc</sub>	2A	500/600V <sub>dc</sub>

●Test circuit



Constant DC voltage/current power supply

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Frequency (Hz)	50	120	300	1k	10k	50k	100k
4.7 to 10μF	0.65	1.00	1.35	1.75	2.30	2.50	2.70
15 to 47μF	0.75	1.00	1.25	1.50	1.75	1.80	1.85
56 to 330μF	0.80	1.00	1.15	1.30	1.40	1.50	1.60

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.