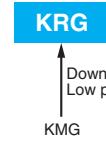


# KRG Series

- Low profile :  $\phi 10 \times 9\text{mm}$  to  $\phi 18 \times 25\text{mm}$
- Endurance : 1,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

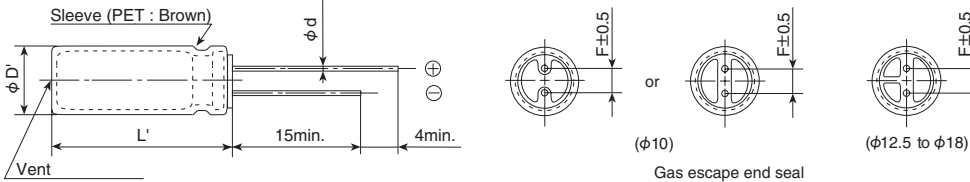


## SPECIFICATIONS

Items	Characteristics						
Category	-55 to +105°C						
Temperature Range	-55 to +105°C						
Rated Voltage Range	6.3 to 50V <sub>dc</sub>						
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)						
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)						
Dissipation Factor (tan δ)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V
	tan δ (Max.)	0.28	0.24	0.20	0.16	0.14	0.12
	When nominal capacitance exceeds 1,000μF, add 0.03 to the value above for each 1,000μF increase. (at 20°C, 120Hz)						
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	6.3V	10V	16V	25V	35V	50V
	Z(-25°C)/Z(+20°C)	5	4	3	2	2	2
	Z(-40°C)/Z(+20°C)	10	8	6	4	3	3
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 1,000 hours at 105°C.						
	Rated voltage	6.3 to 16V <sub>dc</sub>			25 to 50V <sub>dc</sub>		
	Capacitance change	≤ ±25% of the initial value			≤ ±20% of the initial value		
	D.F. (tan δ)	≤ 200% of the initial specified value			≤ 200% of the initial specified value		
	Leakage current	≤ The initial specified value			≤ The initial specified value		
Shelf Life	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 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.						
	Rated voltage	6.3 to 16V <sub>dc</sub>			25 to 50V <sub>dc</sub>		
	Capacitance change	≤ ±25% of the initial value			≤ ±20% of the initial value		
	D.F. (tan δ)	≤ 200% of the initial specified value			≤ 200% of the initial specified value		
	Leakage current	≤ The initial specified value			≤ The initial specified value		

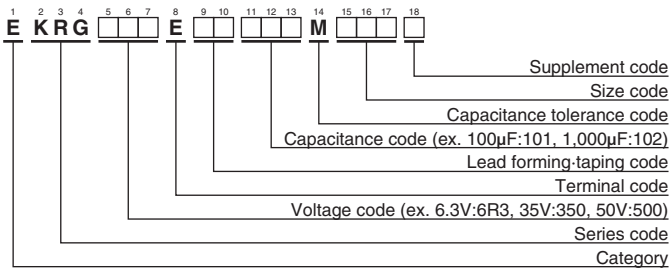
## DIMENSIONS [mm]

- Terminal Code : E



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

## PART NUMBERING SYSTEM



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

KRG Series

◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA <sub>rms</sub> /105°C, 120Hz)	Part No.
6.3	1,000	10 × 9	0.28	365	EKRG6R3E□□102MJ09S	25	330	10 × 9	0.16	270	EKRG250E□□331MJ09S
	4,700	16 × 15	0.37	1,010	EKRG6R3E□□472ML15S		470	10 × 12.5	0.16	370	EKRG250E□□471MJC5S
	6,800	18 × 15	0.43	1,190	EKRG6R3E□□682MM15S		1,000	12.5 × 15	0.16	590	EKRG250E□□102MK15S
	10,000	18 × 20	0.55	1,440	EKRG6R3E□□103MM20S		2,200	18 × 15	0.19	970	EKRG250E□□222MM15S
10	1,000	10 × 12.5	0.24	445	EKRG100E□□102MJC5S		3,300	18 × 20	0.22	1,220	EKRG250E□□332MM20S
	2,200	12.5 × 15	0.27	690	EKRG100E□□222MK15S		4,700	18 × 25	0.25	1,470	EKRG250E□□472MM25S
	3,300	16 × 15	0.30	940	EKRG100E□□332ML15S	35	220	10 × 9	0.14	235	EKRG350E□□221MJ09S
	4,700	18 × 15	0.33	1,120	EKRG100E□□472MM15S		330	10 × 12.5	0.14	340	EKRG350E□□331MJC5S
	6,800	18 × 20	0.39	1,330	EKRG100E□□682MM20S		470	12.5 × 13	0.14	415	EKRG350E□□471MK13S
10,000	18 × 25	0.51	1,700	EKRG100E□□103MM25S	1,000		16 × 15	0.14	720	EKRG350E□□102ML15S	
16	470	10 × 9	0.20	290	EKRG160E□□471MJ09S		2,200	18 × 20	0.17	1,110	EKRG350E□□222MM20S
	1,000	12.5 × 13	0.20	515	EKRG160E□□102MK13S	50	100	10 × 9	0.12	170	EKRG500E□□101MJ09S
	2,200	16 × 15	0.23	830	EKRG160E□□222ML15S		220	10 × 12.5	0.12	290	EKRG500E□□221MJC5S
	3,300	18 × 15	0.26	1,050	EKRG160E□□332MM15S		330	12.5 × 13	0.12	370	EKRG500E□□331MK13S
	4,700	18 × 20	0.29	1,260	EKRG160E□□472MM20S		470	16 × 15	0.12	535	EKRG500E□□471ML15S
	6,800	18 × 25	0.35	1,560	EKRG160E□□682MM25S		1,000	18 × 20	0.12	830	EKRG500E□□102MM20S

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

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Capacitance(μF) \ Frequency(Hz)	50	120	300	1k	10k	100k
100 to 1,000	0.80	1.00	1.15	1.30	1.40	1.50
2,200 to	0.85	1.00	1.03	1.05	1.08	1.08

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.