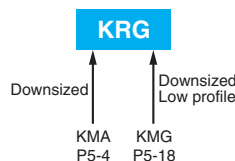


KRG Series

- Low profile : $\phi 4 \times 7\text{mm}$ to $\phi 18 \times 25\text{mm}$
- Endurance : 1,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

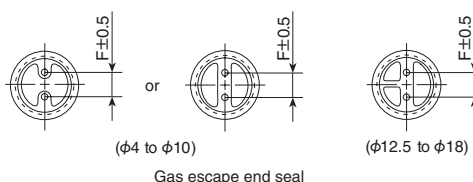
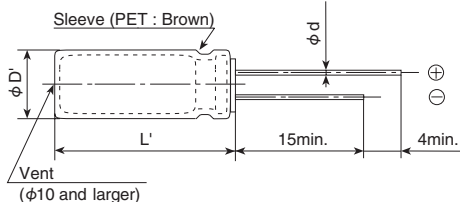


SPECIFICATIONS

Items	Characteristics						
Category	-55 to +105℃						
Temperature Range							
Rated Voltage Range	6.3 to 50V _{dc}						
Capacitance Tolerance	±20% (M) (at 20℃, 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℃ after 2 minutes)						
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	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℃, 120Hz)						
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V
	Z(-25℃)/Z(+20℃)	5	4	3	2	2	2
	Z(-40℃)/Z(+20℃)	10	8	6	4	3	3
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after the rated voltage is applied for 1,000 hours at 105℃.						
	Rated voltage	6.3 to 16V _{dc}				25 to 50V _{dc}	
	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℃ after exposing them for 500 hours at 105℃ 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 _{dc}				25 to 50V _{dc}	
	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	

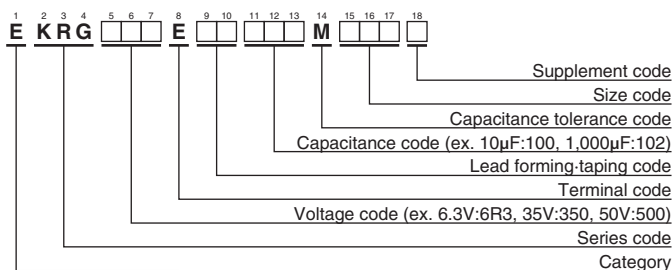
DIMENSIONS [mm]

Terminal Code : E



φD	4	5	6.3	10 & 12.5	16 & 18
φd	0.45	0.45	0.45	0.6	0.8
F	1.5	2.0	2.5	5.0	7.5
φD'	φD+0.5max.				
L'	L+1.5max. (7L : L+1.0max.)				

PART NUMBERING SYSTEM



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

KRG Series

◆STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA _{rms} /105°C, 120Hz)	Part No.	WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA _{rms} /105°C, 120Hz)	Part No.
6.3	47	5 × 7	0.28	50	EKRG6R3E□□470ME07D	25	330	10 × 9	0.16	270	EKRG250E□□331MJ09S
	1,000	10 × 9	0.28	365	EKRG6R3E□□102MJ09S		470	10 × 12.5	0.16	370	EKRG250E□□471MJC5S
	4,700	16 × 15	0.37	1,010	EKRG6R3E□□472ML15S		1,000	12.5 × 15	0.16	590	EKRG250E□□102MK15S
	6,800	18 × 15	0.43	1,190	EKRG6R3E□□682MM15S		2,200	18 × 15	0.19	970	EKRG250E□□222MM15S
	10,000	18 × 20	0.55	1,440	EKRG6R3E□□103MM20S		3,300	18 × 20	0.22	1,220	EKRG250E□□332MM20S
10	22	4 × 7	0.24	35	EKRG100E□□220MD07D	35	4,700	18 × 25	0.25	1,470	EKRG250E□□472MM25S
	100	6.3 × 7	0.24	80	EKRG100E□□101MF07D		10	5 × 7	0.14	36	EKRG350E□□100ME07D
	1,000	10 × 12.5	0.24	445	EKRG100E□□102MJC5S		22	6.3 × 7	0.14	57	EKRG350E□□220MF07D
	2,200	12.5 × 15	0.27	690	EKRG100E□□222MK15S		33	6.3 × 7	0.14	64	EKRG350E□□330MF07D
	3,300	16 × 15	0.30	940	EKRG100E□□332ML15S		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
16	10,000	18 × 25	0.51	1,700	EKRG100E□□103MM25S		1,000	16 × 15	0.14	720	EKRG350E□□102ML15S
	33	5 × 7	0.20	53	EKRG160E□□330ME07D	50	2,200	18 × 20	0.17	1,110	EKRG350E□□222MM20S
	47	6.3 × 7	0.20	68	EKRG160E□□470MF07D		1.0	4 × 7	0.12	10	EKRG500E□□1R0MD07D
	100	6.3 × 7	0.20	97	EKRG160E□□101MF07D		2.2	4 × 7	0.12	15	EKRG500E□□2R2MD07D
	470	10 × 9	0.20	290	EKRG160E□□471MJ09S		3.3	4 × 7	0.12	18	EKRG500E□□3R3MD07D
	1,000	12.5 × 13	0.20	515	EKRG160E□□102MK13S		4.7	4 × 7	0.12	25	EKRG500E□□4R7MD07D
	2,200	16 × 15	0.23	830	EKRG160E□□222ML15S		10	6.3 × 7	0.12	44	EKRG500E□□100MF07D
	3,300	18 × 15	0.26	1,050	EKRG160E□□332MM15S		22	6.3 × 7	0.12	57	EKRG500E□□220MF07D
	4,700	18 × 20	0.29	1,260	EKRG160E□□472MM20S		100	10 × 9	0.12	170	EKRG500E□□101MJ09S
25	6,800	18 × 25	0.35	1,560	EKRG160E□□682MM25S		220	10 × 12.5	0.12	290	EKRG500E□□221MJC5S
	10	4 × 7	0.16	30	EKRG250E□□100MD07D		330	12.5 × 13	0.12	370	EKRG500E□□331MK13S
	22	5 × 7	0.16	46	EKRG250E□□220ME07D		470	16 × 15	0.12	535	EKRG500E□□471ML15S
	33	6.3 × 7	0.16	63	EKRG250E□□330MF07D		1,000	18 × 20	0.12	830	EKRG500E□□102MM20S
	47	6.3 × 7	0.16	71	EKRG250E□□470MF07D						

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

◆RATED RIPPLE CURRENT MULTIPLIERS

● Frequency Multipliers

Capacitance(μF)	Frequency(Hz)	50	120	300	1k	10k	100k
to 4.7		0.65	1.00	1.35	1.75	2.30	2.50
10 to 47		0.75	1.00	1.25	1.50	1.75	1.80
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.