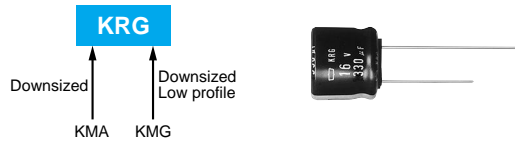


# KRG Series

- 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)
- RoHS Compliant

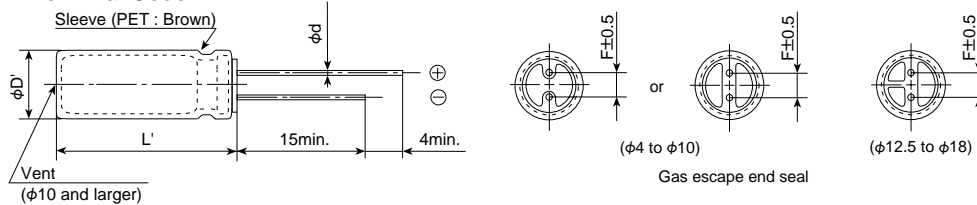


## ◆ SPECIFICATIONS

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 (tanδ)	Rated voltage (V <sub>dc</sub> )	6.3V 10V 16V 25V 35V 50V
	tanδ (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 (at 120Hz)
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. (tanδ)	≤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. (tanδ)	≤200% of the initial specified value ≤200% of the initial specified value
	Leakage current	≤The initial specified value ≤The initial specified value

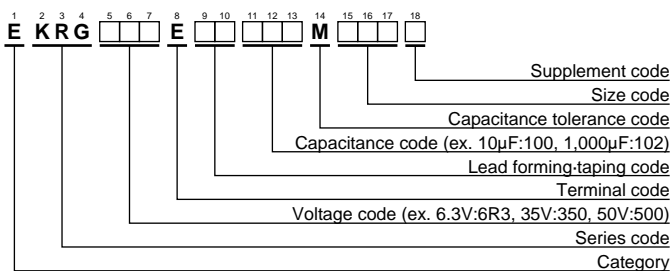
## ◆ DIMENSIONS [mm]

- Terminal Code : E



$\phi D$	4	5	6.3	8	10 & 12.5	16 & 18
$\phi d$	0.45	0.45	0.45	-	-	-
$\phi d$	0.45	0.45	0.45	0.6	0.6	0.8
F	1.5	2.0	2.5	3.5	5.0	7.5
$\phi D'$	$\phi D + 0.5\text{max.}$					
$L'$	$L + 1.5\text{max. (7L : } L + 1.0\text{max.)}$					

## ◆ PART NUMBERING SYSTEM



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

◆STANDARD RATINGS

WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.	WV (Vdc)	Cap (μF)	Case size φD×L(mm)	tanδ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.
6.3	47	5×7	0.28	50	EKRG6R3E□□470ME07D	25	470	10×12.5	0.16	370	EKRG250E□□471MJC5S
	330	6.3×9	0.28	175	EKRG6R3E□□331MF09D		1,000	12.5×15	0.16	590	EKRG250E□□102MK15S
	1,000	10×9	0.28	365	EKRG6R3E□□102MJ09S		2,200	18×15	0.19	970	EKRG250E□□222MM15S
	4,700	16×15	0.37	1,010	EKRG6R3E□□472ML15S		3,300	18×20	0.22	1,220	EKRG250E□□332MM20S
	6,800	18×15	0.43	1,190	EKRG6R3E□□682MM15S		4,700	18×25	0.25	1,470	EKRG250E□□472MM25S
	10,000	18×20	0.55	1,440	EKRG6R3E□□103MM20S						
10	22	4×7	0.24	35	EKRG100E□□220MD07D	35	10	5×7	0.14	36	EKRG350E□□100ME07D
	100	5×9	0.24	93	EKRG100E□□101ME09D		22	6.3×7	0.14	57	EKRG350E□□220MF07D
	100	6.3×7	0.24	80	EKRG100E□□101MF07D		33	5×9	0.14	67	EKRG350E□□330ME09D
	220	6.3×9	0.24	154	EKRG100E□□221MF09D		33	6.3×7	0.14	64	EKRG350E□□330MF07D
	470	8×9	0.24	272	EKRG100E□□471MH09D		100	8×9	0.14	155	EKRG350E□□101MH09D
	1,000	10×12.5	0.24	445	EKRG100E□□102MJC5S		220	10×9	0.14	235	EKRG350E□□221MJ09S
	2,200	12.5×15	0.27	690	EKRG100E□□222MK15S		330	10×12.5	0.14	340	EKRG350E□□331MJC5S
	3,300	16×15	0.30	940	EKRG100E□□332ML15S		470	12.5×13	0.14	415	EKRG350E□□471MK13S
	4,700	18×15	0.33	1,120	EKRG100E□□472MM15S		1,000	16×15	0.14	720	EKRG350E□□102ML15S
	6,800	18×20	0.39	1,330	EKRG100E□□682MM20S		2,200	18×20	0.17	1,110	EKRG350E□□222MM20S
	10,000	18×25	0.51	1,700	EKRG100E□□103MM25S						
16	33	5×7	0.20	53	EKRG160E□□330ME07D	50	1.0	4×7	0.12	10	EKRG500E□□1R0MD07D
	47	6.3×7	0.20	68	EKRG160E□□470MF07D		1.0	5×9	0.12	12	EKRG500E□□1R0ME09D
	100	6.3×7	0.20	97	EKRG160E□□101MF07D		2.2	4×7	0.12	15	EKRG500E□□2R2MD07D
	220	8×9	0.20	205	EKRG160E□□221MH09D		2.2	5×9	0.12	18	EKRG500E□□2R2ME09D
	330	8×9	0.20	251	EKRG160E□□331MH09D		3.3	4×7	0.12	18	EKRG500E□□3R3MD07D
	470	10×9	0.20	290	EKRG160E□□471MJ09S		3.3	5×9	0.12	22	EKRG500E□□3R3ME09D
	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		4.7	5×9	0.12	27	EKRG500E□□4R7ME09D
	3,300	18×15	0.26	1,050	EKRG160E□□332MM15S		10	5×9	0.12	46	EKRG500E□□100ME09D
	4,700	18×20	0.29	1,260	EKRG160E□□472MM20S		10	6.3×7	0.12	44	EKRG500E□□100MF07D
6,800	18×25	0.35	1,560	EKRG160E□□682MM25S	22	5×9	0.12	61	EKRG500E□□220ME09D		
25	10	4×7	0.16	30	EKRG250E□□100MD07D	22	6.3×7	0.12	57	EKRG500E□□220MF07D	
	22	5×7	0.16	46	EKRG250E□□220ME07D	33	6.3×9	0.12	80	EKRG500E□□330MF09D	
	33	6.3×7	0.16	63	EKRG250E□□330MF07D	47	6.3×9	0.12	95	EKRG500E□□470MF09D	
	47	5×9	0.16	75	EKRG250E□□470ME09D	100	10×9	0.12	170	EKRG500E□□101MJ09S	
	47	6.3×7	0.16	71	EKRG250E□□470MF07D	220	10×12.5	0.12	290	EKRG500E□□221MJC5S	
	100	6.3×9	0.16	121	EKRG250E□□101MF09D	330	12.5×13	0.12	370	EKRG500E□□331MK13S	
	100	6.3×9	0.16	121	EKRG250E□□101MF09D	470	16×15	0.12	535	EKRG500E□□471ML15S	
	330	10×9	0.16	270	EKRG250E□□331MJ09S	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
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