

KRE Series

- 5mm height
- Endurance : 1,000 hours at 105°C
- Solvent resistant type
- RoHS2 Compliant

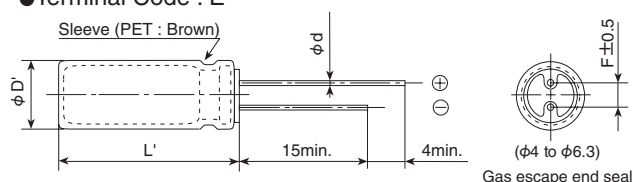


◆ SPECIFICATIONS

Items	Characteristics							
Category								
Temperature Range	-55 to +105℃							
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	(at 20℃, 120Hz)
	tan δ (Max.)	0.27	0.23	0.19	0.15	0.13	0.11	
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V	(at 120Hz)
	Z(-25℃)/Z(+20℃)	3	3	2	2	2	2	
	Z(-40℃)/Z(+20℃)	9	7	5	3	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℃.							
	Capacitance change	≤ ±20% of the initial value						
	D.F. (tan δ)	≤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℃ 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.							
	Capacitance change	≤ ±20% of the initial value						
	D.F. (tan δ)	≤200% of the initial specified value						
	Leakage current	≤The initial specified value						

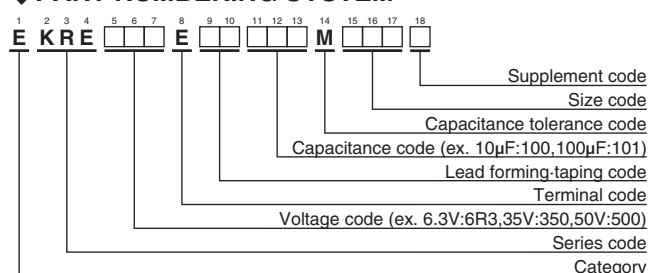
◆ DIMENSIONS [mm]

- Terminal Code : E



φD	4	5	6.3
φd	0.45	0.45	0.45
F	1.5	2.0	2.5
φD'	φD+0.5max.		
L'	L+1.0max.		

◆ PART NUMBERING SYSTEM



◆ RATED RIPPLE CURRENT MULTIPLIERS

- Frequency Multipliers

Capacitance(μF)	Frequency(Hz)				
	120	300	1k	10k	100k
1	1.00	1.25	1.50	1.75	1.80
2.2 to 10	1.00	1.15	1.30	1.40	1.50
22 to 100	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.

◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.
6.3	10	4×5	0.27	12	EKRE6R3E□□100MD05D
	22	4×5	0.27	21	EKRE6R3E□□220MD05D
	47	5×5	0.27	36	EKRE6R3E□□470ME05D
	100	6.3×5	0.27	56	EKRE6R3E□□101MF05D
10	33	5×5	0.23	34	EKRE100E□□330ME05D
16	4.7	4×5	0.19	9.4	EKRE160E□□4R7MD05D
	10	4×5	0.19	16	EKRE160E□□100MD05D
	22	5×5	0.19	30	EKRE160E□□220ME05D
	47	6.3×5	0.19	48	EKRE160E□□470MF05D
25	3.3	4×5	0.15	8.8	EKRE250E□□3R3MD05D
	4.7	4×5	0.15	12	EKRE250E□□4R7MD05D
	33	6.3×5	0.15	45	EKRE250E□□330MF05D

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA rms/105°C, 120Hz)	Part No.
35	2.2	4×5	0.13	7.7	EKRE350E□□2R2MD05D
	3.3	4×5	0.13	11	EKRE350E□□3R3MD05D
	4.7	4×5	0.13	15	EKRE350E□□4R7MD05D
	10	5×5	0.13	25	EKRE350E□□100ME05D
	22	6.3×5	0.13	40	EKRE350E□□220MF05D
50	1.0	4×5	0.11	5.6	EKRE500E□□1R0MD05D
	2.2	4×5	0.11	10	EKRE500E□□2R2MD05D
	3.3	4×5	0.11	14	EKRE500E□□3R3MD05D
	4.7	5×5	0.11	19	EKRE500E□□4R7ME05D
	10	6.3×5	0.11	29	EKRE500E□□100MF05D

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

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