

# KRE Series

- 5mm height, 1000-hours-life at 105°C
- Solvent-proof type (see PRECAUTIONS AND GUIDELINES)
- Pb-free design (φ4 to φ6.3)

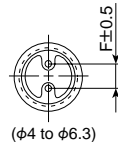
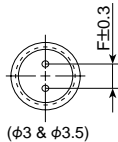
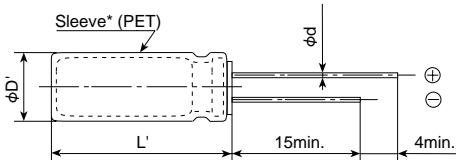


## ◆ SPECIFICATIONS

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.)	0.27	0.23	0.19	0.15	0.13	0.11	
	Add 0.02 for φ3 products. (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)	3	3	2	2	2	2	
	Z(-40°C)/Z(+20°C)	9	7	5	3	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 1000 hours at 105°C.							
	φD (mm)	φ3 & φ3.5			φ4 to φ6.3			
	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.							
	φD	φ3 & φ3.5			φ4 to φ6.3			
	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

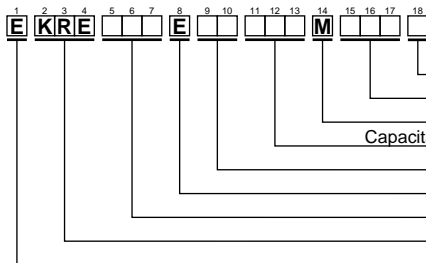


Gas escape end seal

φD	3	3.5	4	5	6.3
φd	0.4	0.4	0.45	0.45	0.45
F	1.0	1.0	1.5	2.0	2.5
φD'	φD+0.5max.				
L'	L+1.0max.				

\*φ3, φ3.5 : PVC

## ◆ PART NUMBERING SYSTEM



Supplement code  
 Size code  
 Capacitance tolerance code  
 Capacitance code (ex. 0.1μF:R10, 10μF:100, 100μF:101)  
 Lead forming-taping code  
 Terminal code  
 Voltage code (ex. 6.3V:6R3, 35V:350, 50V:500)  
 Series code  
 Category

Please refer to "A guide to global code (radial lead type)"

## ◆STANDARD RATINGS

WV (V <sub>dc</sub> )	Cap (μF)	Case size φDXL(mm)	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C,120Hz)	Part No.	WV (V <sub>dc</sub> )	Cap (μF)	Case size φDXL(mm)	tanδ	Rated ripple current (mA <sub>rms</sub> /105°C,120Hz)	Part No.
6.3	10	3×5	0.27	12	EKRE6R3E□□100MB05N	35	2.2	3×5	0.13	7.7	EKRE350E□□2R2MB05N
	15	3.5×5	0.27	16	EKRE6R3E□□150MC05N		3.3	3.5×5	0.13	11	EKRE350E□□3R3MC05N
	22	4×5	0.27	21	EKRE6R3E□□220MD05D		4.7	4×5	0.13	15	EKRE350E□□4R7MD05D
	47	5×5	0.27	36	EKRE6R3E□□470ME05D		6.8	5×5	0.13	20	EKRE350E□□6R8ME05D
	100	6.3×5	0.27	56	EKRE6R3E□□101MF05D		10	5×5	0.13	25	EKRE350E□□100ME05D
10	6.8	3×5	0.23	11	EKRE100E□□6R8MB05N	15	6.3×5	0.13	33	EKRE350E□□150MF05D	
	15	4×5	0.23	20	EKRE100E□□150MD05D	22	6.3×5	0.13	40	EKRE350E□□220MF05D	
	33	5×5	0.23	34	EKRE100E□□330ME05D	50	0.10	3×5	0.11	1.3	EKRE500E□□R10MB05N
	68	6.3×5	0.23	52	EKRE100E□□680MF05D		0.15	3×5	0.11	2.0	EKRE500E□□R15MB05N
16	4.7	3×5	0.19	9.4	EKRE160E□□4R7MB05N		0.22	3×5	0.11	2.6	EKRE500E□□R22MB05N
	6.8	3.5×5	0.19	13	EKRE160E□□6R8MC05N		0.33	3×5	0.11	3.2	EKRE500E□□R33MB05N
	10	3.5×5	0.19	16	EKRE160E□□100MC05N		0.47	3×5	0.11	3.8	EKRE500E□□R47MB05N
	15	5×5	0.19	25	EKRE160E□□150ME05D		0.68	3×5	0.11	4.6	EKRE500E□□R68MB05N
	22	5×5	0.19	30	EKRE160E□□220ME05D		1.0	3×5	0.11	5.6	EKRE500E□□1R0MB05N
25	47	6.3×5	0.19	48	EKRE160E□□470MF05D		1.5	3×5	0.11	6.9	EKRE500E□□1R5MB05N
	3.3	3×5	0.15	8.8	EKRE250E□□3R3MB05N		2.2	3.5×5	0.11	10	EKRE500E□□2R2MC05N
	4.7	3.5×5	0.15	12	EKRE250E□□4R7MC05N		3.3	4×5	0.11	14	EKRE500E□□3R3MD05D
	6.8	4×5	0.15	16	EKRE250E□□6R8MD05D		4.7	5×5	0.11	19	EKRE500E□□4R7ME05D
	33	6.3×5	0.15	45	EKRE250E□□330MF05D		6.8	6.3×5	0.11	24	EKRE500E□□6R8MF05D
							10	6.3×5	0.11	29	EKRE500E□□100MF05D

□□ : Lead forming / Taping code

Note : The case size of φ3.5×5 will be unified to φ4×5.