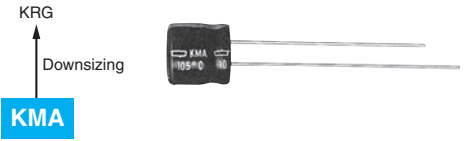


KMA Series

- 7mm height
- Endurance : 1,000 hours at 105°C
- Solvent resistant type (see PRECAUTIONS AND GUIDELINES)
- RoHS2 Compliant

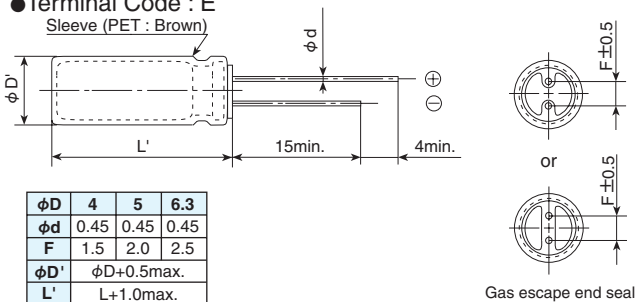


◆ SPECIFICATIONS

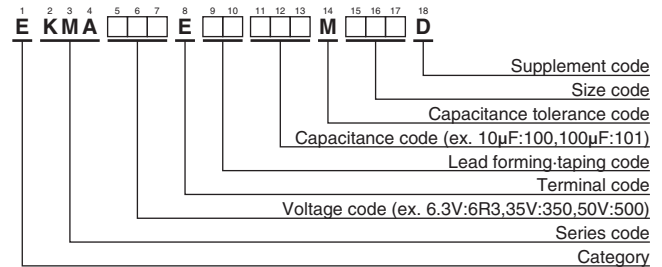
Items	Characteristics	
Category	-55 to +105°C	
Temperature Range	-55 to +105°C	
Rated Voltage Range	4 to 63V _{dc}	
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)	
Leakage Current	I=0.01CV or 3μA, whichever is greater. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 2 minutes)	
Dissipation Factor (tan δ)	Rated voltage (V _{dc})	4V 6.3V 10V 16V 25V 35V 50V 63V
	tan δ (Max.)	0.35 0.22 0.19 0.16 0.14 0.12 0.10 0.08 (at 20°C, 120Hz)
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	4V 6.3V 10V 16V 25V 35V 50V 63V
	Z(-25°C)/Z(+20°C)	4 3 2 2 2 2 2 2
	Z(-40°C)/Z(+20°C)	10 6 5 3 3 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 1,000 hours at 105°C.	
	Rated voltage	4 to 16V _{dc} 25 to 63V _{dc}
	Capacitance change	≤ ±25% of the initial value ≤ ±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°C after exposing them for 1,000 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	4 to 16V _{dc} 25 to 63V _{dc}
	Capacitance change	≤ ±25% of the initial value ≤ ±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
- Sleeve (PET : Brown)



◆ PART NUMBERING SYSTEM



◆ STANDARD RATINGS

WV (V _{dc})	Cap (μF)	Case size φD×L(mm)	tan δ	Rated ripple current (mA _{rms} /105°C, 120Hz)	Part No.
4	33	4 × 7	0.35	26	EKMA4R0E□□330MD07D
	47	4 × 7	0.35	34	EKMA4R0E□□470MD07D
	100	5 × 7	0.35	61	EKMA4R0E□□101ME07D
	220	6.3 × 7	0.35	95	EKMA4R0E□□221MF07D
6.3	22	4 × 7	0.22	31	EKMA6R3E□□220MD07D
	47	5 × 7	0.22	47	EKMA6R3E□□470ME07D
10	33	5 × 7	0.19	43	EKMA100E□□330ME07D
	100	6.3 × 7	0.19	80	EKMA100E□□101MF07D
16	10	4 × 7	0.16	25	EKMA160E□□100MD07D
	22	5 × 7	0.16	39	EKMA160E□□220ME07D
	47	6.3 × 7	0.16	59	EKMA160E□□470MF07D
25	100	6.3 × 7	0.16	97	EKMA160E□□101MF07D
	33	6.3 × 7	0.14	53	EKMA250E□□330MF07D
47	6.3 × 7	0.14	71	EKMA250E□□470MF07D	
35	4.7	4 × 7	0.12	20	EKMA350E□□4R7MD07D
	10	5 × 7	0.12	30	EKMA350E□□100ME07D
	22	6.3 × 7	0.12	47	EKMA350E□□220MF07D
	33	6.3 × 7	0.12	64	EKMA350E□□330MF07D
50	1.0	4 × 7	0.10	10	EKMA500E□□1R0MD07D
	2.2	4 × 7	0.10	15	EKMA500E□□2R2MD07D
	3.3	4 × 7	0.10	18	EKMA500E□□3R3MD07D
	4.7	5 × 7	0.10	23	EKMA500E□□4R7ME07D
	10	6.3 × 7	0.10	34	EKMA500E□□100MF07D
22	6.3 × 7	0.10	57	EKMA500E□□220MF07D	
63	1.0	4 × 7	0.08	11	EKMA630E□□1R0MD07D
	2.2	4 × 7	0.08	17	EKMA630E□□2R2MD07D
	3.3	5 × 7	0.08	21	EKMA630E□□3R3ME07D
	4.7	6.3 × 7	0.08	26	EKMA630E□□4R7MF07D
	10	6.3 × 7	0.08	43	EKMA630E□□100MF07D

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

◆ 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 220	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.