

# KMA Series

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

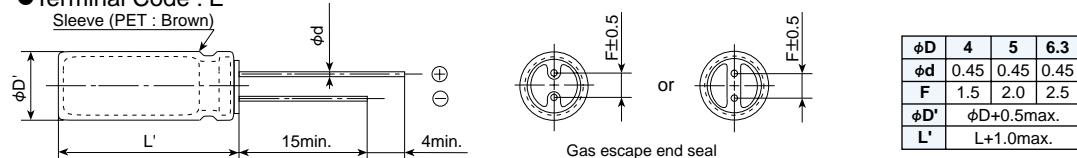


## ◆ SPECIFICATIONS

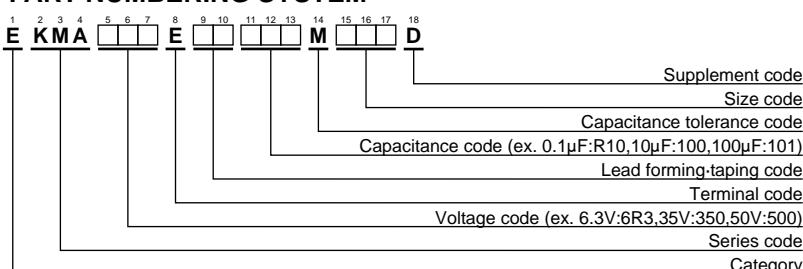
Items	Characteristics												
Category Temperature Range	-55 to +105°C												
Rated Voltage Range	4 to 63V <sub>dc</sub>												
Capacitance Tolerance	$\pm 20\%$ (M) (at 20°C, 120Hz)												
Leakage Current	$I=0.01CV$ or $3\mu A$ , whichever is greater. Where, I : Max. leakage current ( $\mu A$ ), C : Nominal capacitance ( $\mu F$ ), V : Rated voltage (V) (at 20°C after 2 minutes)												
Dissipation Factor (tan $\delta$ )	Rated voltage (V <sub>dc</sub> )	4V	6.3V	10V	16V	25V	35V	50V					
	tan $\delta$ (Max.)	0.35	0.22	0.19	0.16	0.14	0.12	0.10					
								0.08					
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V <sub>dc</sub> )	4V	6.3V	10V	16V	25V	35V	50V					
	Z(-25°C)/Z(+20°C)	4	3	2	2	2	2	2					
	Z(-40°C)/Z(+20°C)	10	6	5	3	3	3	3					
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 <sub>dc</sub>		25 to 63V <sub>dc</sub>									
	Capacitance change	$\leq \pm 25\%$ of the initial value		$\leq \pm 20\%$ of the initial value									
	D.F. (tan $\delta$ )	$\leq 200\%$ of the initial specified value											
	Leakage current	$\leq$ 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 <sub>dc</sub>		25 to 63V <sub>dc</sub>									
	Capacitance change	$\leq \pm 25\%$ of the initial value		$\leq \pm 20\%$ of the initial value									
	D.F. (tan $\delta$ )	$\leq 200\%$ of the initial specified value											
	Leakage current	$\leq$ The initial specified value											

## ◆ DIMENSIONS [mm]

- Terminal Code : E



## ◆ PART NUMBERING SYSTEM



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



# MINIATURE ALUMINUM ELECTROLYTIC CAPACITORS

7mm height, 105°C

## KMA Series

### ◆STANDARD RATINGS

WV (Vdc)	Cap ( $\mu$ F)	Case size $\phi$ DXL(mm)	$\tan\delta$	Rated ripple current (mA rms/ 105°C, 120Hz)	Part No.	WV (Vdc)	Cap ( $\mu$ F)	Case size $\phi$ DXL(mm)	$\tan\delta$	Rated ripple current (mA rms/ 105°C, 120Hz)	Part No.
4	33	4X7	0.35	26	EKMA4R0E□□330MD07D	50	0.10	4X7	0.10	1.3	EKMA500E□□R10MD07D
	47	4X7	0.35	34	EKMA4R0E□□470MD07D		0.15	4X7	0.10	2.0	EKMA500E□□R15MD07D
	100	5X7	0.35	61	EKMA4R0E□□101ME07D		0.22	4X7	0.10	2.9	EKMA500E□□R22MD07D
	220	6.3X7	0.35	95	EKMA4R0E□□221MF07D		0.33	4X7	0.10	3.5	EKMA500E□□R33MD07D
6.3	22	4X7	0.22	31	EKMA6R3E□□220MD07D		0.47	4X7	0.10	5.0	EKMA500E□□R47MD07D
	47	5X7	0.22	47	EKMA6R3E□□470ME07D		0.68	4X7	0.10	7.1	EKMA500E□□R68MD07D
10	15	4X7	0.19	28	EKMA100E□□150MD07D		1.0	4X7	0.10	10	EKMA500E□□R10MD07D
	33	5X7	0.19	43	EKMA100E□□330ME07D		1.5	4X7	0.10	12	EKMA500E□□R15MD07D
	68	6.3X7	0.19	63	EKMA100E□□680MF07D		2.2	4X7	0.10	15	EKMA500E□□R22MD07D
	100	6.3X7	0.19	80	EKMA100E□□101MF07D		3.3	4X7	0.10	18	EKMA500E□□R33MD07D
16	6.8	4X7	0.16	20	EKMA160E□□6R8MD07D		4.7	5X7	0.10	23	EKMA500E□□R47ME07D
	10	4X7	0.16	25	EKMA160E□□100MD07D		6.8	6.3X7	0.10	28	EKMA500E□□R68MF07D
	15	5X7	0.16	31	EKMA160E□□150ME07D		10	6.3X7	0.10	34	EKMA500E□□R100MF07D
	22	5X7	0.16	39	EKMA160E□□220ME07D		22	6.3X7	0.10	57	EKMA500E□□R220MF07D
	47	6.3X7	0.16	59	EKMA160E□□470MF07D		0.10	4X7	0.08	1.3	EKMA630E□□R10MD07D
	100	6.3X7	0.16	97	EKMA160E□□101MF07D		0.15	4X7	0.08	1.9	EKMA630E□□R15MD07D
25	33	6.3X7	0.14	53	EKMA250E□□330MF07D	63	0.22	4X7	0.08	2.9	EKMA630E□□R22MD07D
	47	6.3X7	0.14	71	EKMA250E□□470MF07D		0.33	4X7	0.08	4.4	EKMA630E□□R33MD07D
35	4.7	4X7	0.12	20	EKMA350E□□4R7MD07D		0.47	4X7	0.08	7.9	EKMA630E□□R47MD07D
	6.8	5X7	0.12	24	EKMA350E□□6R8ME07D		0.68	4X7	0.08	9.2	EKMA630E□□R68MF07D
	10	5X7	0.12	30	EKMA350E□□100ME07D		1.0	4X7	0.08	11	EKMA630E□□R100MF07D
	15	6.3X7	0.12	37	EKMA350E□□150MF07D		1.5	4X7	0.08	13	EKMA630E□□R15MD07D
	22	6.3X7	0.12	47	EKMA350E□□220MF07D		2.2	4X7	0.08	17	EKMA630E□□R22MD07D
	33	6.3X7	0.12	64	EKMA350E□□330MF07D		3.3	5X7	0.08	21	EKMA630E□□R33MD07D
							4.7	6.3X7	0.08	26	EKMA630E□□R47MF07D
							10	6.3X7	0.08	43	EKMA630E□□R100MF07D

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