

KMG Series

- Downsized from current standard KME series
- Solvent-proof type except 350 to 450V_{dc}
(see PRECAUTIONS AND GUIDELINES)

KMG

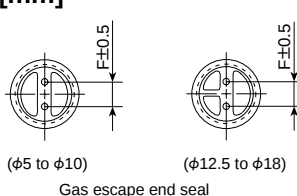
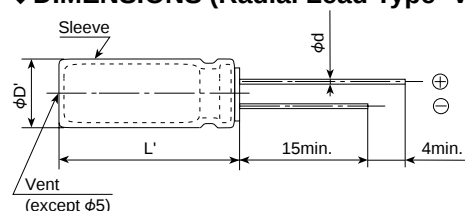
↑ downsized
KME



SPECIFICATIONS

Items	Characteristics												
Category	Standard												
Temperature Range	-55 to +105°C(6.3 to 100V _{dc}) -40 to +105°C(160 to 400V _{dc}) -25 to +105°C(450V _{dc})												
Rated Voltage Range	6.3 to 450V _{dc}												
Capacitance Tolerance	±20% (M) (at 20°C, 120Hz)												
Leakage Current	6.3 to 100V _{dc}							160 to 450V _{dc}					
	I=0.03CV or 4μA, whichever is greater.							CV \ Time		After 1minute		After 5minutes	
								CV≤1000		I=0.1CV+40		I=0.03CV+15	
								CV>1000		I=0.04CV+100		I=0.02CV+25	
	(at 20°C after 1 minute)							(at 20°C)					
	Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V)												
Dissipation Factor (tanδ)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V	63V	100V	160 to 250V	350 to 400V	450V	
	tanδ (Max.)	0.34	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.20	0.24	0.24	
	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase. (at 20°C, 120Hz)												
Low Temperature Characteristics (Max. Impedance Ratio)	Rated voltage (V _{dc})	6.3V	10V	16V	25V	35V	50V	63V	100V	160 to 250V	350 to 400V	450V	
	Z(-25°C)/Z(+20°C)	5	4	3	2	2	2	2	2	3	6	6	
	Z(-40°C)/Z(+20°C)	12	10	8	5	4	3	3	3	4	6	—	(at 120Hz)
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 1000 hours (2000 hours to meet the following two conditions 1) : 160V _{dc} and larger, 2) : φ12.5 and larger) at 105°C.												
	Capacitance change	≤±20% of the initial value											
	D.F. (tanδ)	≤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 1000 hours at 105°C without voltage applied.												
	Rated voltage	6.3 to 100V _{dc}						160 to 450V _{dc}					
	Capacitance change	≤±20% 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						≤500% of the initial specified value					

DIMENSIONS (Radial Lead Type=VB) [mm]



φD	5	6.3	8	10	12.5	16	18
φd	0.5	0.5	0.6	0.6	0.6	0.8	0.8
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φD'	φD+0.5max.						
L'	L+1.5max						

PART NUMBERING SYSTEM

KMG 6.3 VB 1000 M

Capacitance tolerance (±20%)
Nominal capacitance code
Radial lead type
Rated voltage in volts
Series name

Capacitance	Code
0.1µF	R1
0.47µF	R47
1.0µF	1
4.7µF	4R7
10µF	10
100µF	100

◆STANDARD RATINGS

μF \ V _{dc}	6.3	10	16	25	35	50	63	100
0.1						5×11	1.3	5×11 1.5
0.22						5×11	2.9	5×11 3.4
0.33						5×11	4.3	5×11 5.0
0.47						5×11	6.2	5×11 7.1
1.0						5×11	13	5×11 15
2.2						5×11	20	5×11 21
3.3						5×11	25	5×11 29
4.7						5×11	30	5×11 32
10						5×11	40	5×11 46
22						5×11	65	5×11 71
33						5×11	90	5×11 100
47						5×11	110	5×11 120
100						5×11	180	5×11 215
220	5×11 140	6.3×11 170	6.3×11 180	8×11.5 230	8×11.5 270	10×12.5 300	10×16 335	12.5×25 440
330	6.3×11 190	6.3×11 200	8×11.5 260	8×11.5 310	10×12.5 350	10×16 410	10×20 510	16×25 540
470	6.3×11 230	8×11.5 250	8×11.5 310	10×12.5 380	10×16 460	10×20 530	12.5×20 640	16×31.5 715
1,000	8×11.5 380	10×12.5 460	10×16 560	10×20 680	12.5×20 810	12.5×25 950	16×25 930	18×40 985
2,200	10×20 710	10×20 760	12.5×20 920	12.5×25 1,090	16×25 1,260	16×35.5 1,470		
3,300	10×20 840	12.5×20 1,000	12.5×25 1,170	16×25 1,400	16×35.5 1,610	18×35.5 1,770		
4,700	12.5×20 1,090	12.5×25 1,260	16×25 1,480	16×31.5 1,710	18×35.5 1,910			
6,800	12.5×25 1,350	16×25 1,570	16×31.5 1,780	18×35.5 2,040				
10,000	16×25 1,650	16×35.5 1,890	18×35.5 2,060					
15,000	16×35.5 2,010	18×35.5 2,180						
22,000	18×40 2,350							

		Non solvent-proof									
μF \ V _{dc}	160	200	250	350	400	450					
0.47				6.3×11 11			10×12.5 9				
1.0				6.3×11 15	6.3×11 15		10×12.5 13				
2.2			6.3×11 23	8×11.5 26	8×11.5 26		10×12.5 23				
3.3	6.3×11 28	6.3×11 28	8×11.5 32	10×12.5 38	10×12.5 38		10×16 31				
4.7	6.3×11 34	8×11.5 39	8×11.5 39	10×16 50	10×16 50		10×20 40				
10	10×12.5 67	10×16 74	10×16 74	10×20 80	10×20 80		12.5×20 65				
22	10×20 120	10×20 120	12.5×20 130	12.5×20 130	12.5×25 145		16×25 115				
33	10×20 145	12.5×20 160	12.5×20 160	16×25 195	16×25 195		16×31.5 155				
47	12.5×20 195	12.5×20 195	12.5×25 210	16×25 230	16×31.5 250		16×35.5 185				
100	16×25 335	16×25 335	16×31.5 365	18×31.5 375	16×40 350						
220	16×31.5 540	18×35.5 575	18×40 585								
330	18×35.5 705										

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

Capacitance (μF) \ Frequency (Hz)	50	120	300	1k	10k	100k
0.1 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