KMG Series

● 105℃ 1,000~2,000Hrs assured

- General
- EKMG Series : Ecological capacitors with the same characteristics as KMG

Solvent-proof

WV≤100 V_{DC}

KME → KMG

Downsized

SPECIFICATIONS

Item	Characteristics		
Rated Voltage Range	6.3~100V_{DC}	160 ~ 400V_{DC}	450 V_{DC}
Operating Temperature Range	-55 ~ +105℃	-40 ~ +105℃	-25 ~ +105℃
Capacitance Tolerance	±20% (M) (at 20℃, 120Hz)		
Leakage Current(max.) at 20℃	The following specifications shall be satisfied when the rated voltage is applied for the required time		
	≤100V_{DC}	>100V_{DC}	
	After 1 minute : 0.03 CV(μA) or 4 μA, whichever is greater After 2 minute : 0.01 CV(μA) or 3 μA, whichever is greater Where, C=Nominal capacitance(μF) V=Rated Voltage(V_{DC})	After 1 minute: CV≤1,000: 0.1CV+40; CV>1,000: 0.04CV+100 After 5 minute: CV≤1,000: 0.03CV+15; CV>1,000: 0.02CV+25	
Dissipation Factor (Tanδ)	Rated Voltage(V_{DC}): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 / 160~250 / 350~450 Tanδ(Max.): 0.34 / 0.24 / 0.20 / 0.16 / 0.14 / 0.12 / 0.10 / 0.09 / 0.2 / 0.24 When the capacitance exceeds 1,000μF, 0.02 shall be added every 1,000μF increase (at 20℃, 120Hz)		
Temperature Characteristics (Max. Impedance ratio)	Rated Voltage(V_{DC}): 6.3 / 10 / 16 / 25 / 35 / 50 / 63~160 / 200~250 / 350~400 / 450 Z(-25℃)/Z(20℃): 5 / 4 / 3 / 2 / 2 / 2 / 3 / 3 / 6 / 6 Z(-40℃)/Z(20℃): 12 / 10 / 8 / 5 / 4 / 3 / 4 / 5 / 6 / - (at 120Hz)		
Load Life	The following specifications shall be satisfied when the capacitors are restored to after the rated voltage applied for 2,000 hours at 105℃ (where, 1000 hours ≤ 8Ø) Capacitance change ≤±20% of the initial value 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℃ after exposing them for 1,000hours at 105℃ without voltage applied. The rated voltage shall be applied to the capacitors for a minimum of 30 minutes, at least 24 hours and not more than 48 hours before the measurement. (where, 500 hours ≤ 8Ø) Capacitance change ≤±20% of the initial value Tanδ ≤200% of the initial specified value Leakage current ≤ The initial specified value(where, 200% for≥ WV 160 V_{DC})		
Others	Satisfied characteristics W of KS C 6421		

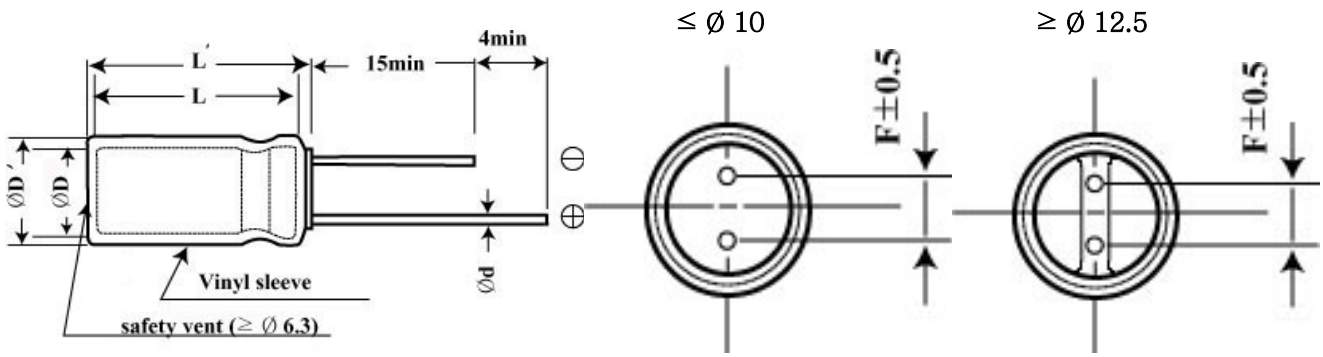
RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Freq(Hz) / Cap.(μF)	60	120	300	1K	10K
0.1~6.8	0.65	1.00	1.35	1.75	2.30
10~68	0.75	1.00	1.25	1.50	1.75
100~1,000	0.80	1.00	1.15	1.30	1.40
2,200~	0.85	1.00	1.03	1.05	1.08

DIMENSIONS OF KMG Series

Unit(mm)



Ø D	F	Ø d
5	2	0.5
6.3	2.5	0.5
8	3.5	0.6
10	5	0.6
12.5	5	0.6
16	7.5	0.8
18	7.5	0.8

Marking : BROWN SLEEVE, WHITE INK

Ø D≤8, Ø D' ≤ D+0.5 and L' ≤ L+1.5

Ø D>8, Ø D' ≤ D+0.5 and L' ≤ L+2.0

RATINGS OF KMG Series

V_{DC} / μF	6.3(0J)		10(1A)		16(1C)		25(1E)		35(1V)		50(1H)		63(1J)	
0.1											5×11	2.1	5×11	3.2
0.22											5×11	3.2	5×11	4.3
0.33											5×11	6.3	5×11	7.2
0.47											5×11	10	5×11	11
0.68											5×11	12	5×11	13
1											5×11	13	5×11	15
2.2											5×11	18	5×11	19
3.3											5×11	30	5×11	33
4.7							5×11	25	5×11	27	5×11	37	5×11	39
6.8							5×11	31	5×11	33	5×11	44	5×11	48
10					5×11	35	5×11	37	5×11	40	5×11	54	5×11	59
22			5×11	48	5×11	53	5×11	56	5×11	67	5×11	79	5×11	87
33	5×11	52	5×11	56	5×11	60	5×11	75	5×11	80	5x11	97	6.3x11	122
47	5×11	61	5×11	66	5×11	77	5x11	80	5x11	101	6.3x11	133	6.3x11	146
68	5×11	69	5×11	83	5×11	92	5x11	113	6.3x11	138	8x11.5	189	8x11.5	207
100	5×11	90	5×11	100	5x11	125	6.3x11	159	6.3x11	168	8x11.5	229	10x12.5	251
220	5×11	153	5x11	170	6.3x11	213	8x11.5	277	8x11.5	294	10x12.5	395	10x16	474
330	6.3x11	216	6.3x11	239	8x11.5	308	8x11.5	340	10x12.5	419	10x16	529	10x20	633
470	6.3x11	258	6.3x11	286	8x11.5	366	10x12.5	471	10x16	547	10x20	690	12.5x20	886
680	8x11.5	365	10x12.5	472	10x12.5	480	10x16	620	12.5x16	777	12.5x20	973	12.5x25	1,160
1,000	8x11.5	443	10x12.5	571	10x16	680	10x20	821	12.5x20	1,023	12.5x25	1,287	16x25	1,565
2,200	10x20	817	12.5x20	886	12.5x20	1,108	12.5x25	1,297	16x25	1,497	16x35.5	1,884		
3,300	10x20	1,032	12.5x20	1,205	12.5x25	1,389	16x25	1,646	16x35.5	1,950	18x35.5	2,260		
4,700	12.5x20	1,280	12.5x25	1,492	16x25	1,740	16x31.5	2,012	18x35.5	2,335				
6,800	12.5x25	1,554	16x25	1,824	16x31.5	2,081	18x35.5	2,452						
10,000	16x25	1,897	16x35.5	2,201	18x35.5	2,527								
15,000	16x35.5	2,344	18x35.5	2,606										

▲ Permissible Ripple Current(mArms / 105℃, 120Hz)

▲ Case Size ϕDXL(mm)

V_{DC} / μF	100(2A)		160(2C)		200(2D)		250(2E)		350(2V)		400(2G)		450(2W)	
0.1	5x11	3.6												
0.22	5x11	4.8												
0.33	5x11	7.8												
0.47	5x11	12	6.3x11	12	6.3x11	12	6.3x11	12	6.3x11	12				
0.68	5x11	14	6.3x11	14	6.3x11	15	6.3x11	15	6.3x11	15				
1	5x11	16	6.3x11	16	6.3x11	17	6.3x11	17	6.3x11	18	6.3x11	19	8x11.5	16
2.2	5x11	21	6.3x11	22	6.3x11	24	6.3x11	27	8x11.5	29	8x11.5	30	10x12.5	28
3.3	5x11	34	6.3x11	35	6.3x11	36	8x11.5	37	8x11.5	38	10x12.5	41	10x16	38
4.7	5x11	40	6.3x11	41	8x11.5	42	8x11.5	45	10x12.5	47	10x16	49	10x20	45
6.8	5x11	49	8x11.5	52	10x12.5	59	10x12.5	60	10x16	62	10x16	65	10x20	59
10	6.3x11	61	10x12.5	71	10x12.5	72	10x16	74	10x20	79	10x20	86	12.5x20	84
22	6.3x11	100	10x20	117	10x20	119	10x20	127	12.5x20	150	12.5x25	163	16x25	151
33	8x11.5	144	10x20	156	10x20	158	12.5x20	184	16x25	200	16x25	222	16x31.5	203
47	10x12.5	199	12.5x20	218	12.5x20	220	12.5x25	238	16x25	265	16x31.5	290	16x35.5	254
68	10x16	264	12.5x25	287	16x20	293	16x25	318	16x31.5	348	18x35.5	392		
100	10x20	349	12.5x25	360	16x25	386	16x31.5	422	18x31.5	450				
220	12.5x25	662	16x31.5	680	18x35.5	705	18x40	730						
330	16x20	810	18x35.5	863										
470	16x25	1072												
680	18x31.5	1410												
1,000	18x40	2020												

▲ Permissible Ripple Current(mArms / 105℃, 120Hz)

▲ Case Size ϕDXL(mm)