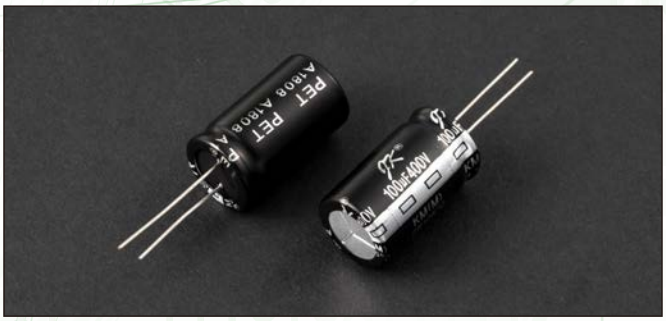
KM Series



- ●Wide operating temperature range of - 40 ~ + 105℃
- ●Use in communication equipments,switching power supply,etc
- ●Voltage range of 6.3 ~ 450V
- ●High CV value
- ● Rohs compliance.

■SPECIFICATIONS

Item	Characteristics		
Operating Temperature Range	- 40 ~ +105℃	- 40 ~ +105℃	- 25 ~ + 105℃
Voltage Range	6.3 ~ 100 V.DC	160 ~ 350 V.DC	400 ~ 450 V.DC
Nominal Cap. Range	0.1 ~ 22000 μF	0.47 ~470μF	2.2~100 μF
Capacitance Tolerance	- 20% ~ + 20% (at 20℃, 120Hz)		
Leakage Current	WV: 6.3 V ~ 100 V; 160 V ~ 450 V L.C.: I =0.01CV or 3(μA) whichever is greater(after 2min); I =0.03CV or 4(μA) whichever is greater(after 1min); I = 0.02CV + 15(μA) .(after 5 min.) where,I: Max Leakage Current(μA), C: Nominal Capacitance(μF), V: Rated Voltage(V) (at 20 ℃)		

Dissipation Factor (tanδ) (at 120Hz, +20℃)

WV	6.3	10	16	25	35	50	63	100	160~250	350~450
tanδ	0.28	0.24	0.20	0.16	0.14	0.12	0.10	0.08	0.15	0.20

Add 0.02 per 1,000 μF for more than 1,000μF items.

Low Temp. Impedance Stability at 120Hz

W. V.	6.3	10	16	25~35	50~100	160	200~350	400	450
Z - 25℃ / Z + 20℃	5	4	3	2	2	3	4	6	10
Z - 40℃ / Z + 20℃	8	6	4	3	3	4	8	-	-

High Temp. Load Test

After 2000 hours, application of DC rated working voltage at + 105℃, the capacitor shall meet the followimg limits.

Capacitance change ... ≦±20% of the initial measured value

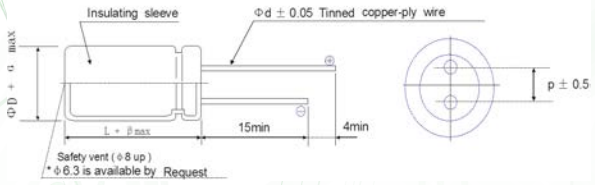
Tan δ ... ≦ 200% of the initial specified value

DC leakage current ... ≦ the initial specified value

High Temp. Non-Load Test

After storage for 1000 hours at 105℃ with no voltage applied, voltage treatment of JIS-C-5102 article 4-4 is to be given and then measurement shall be made, at which time requirements specified in the table "High temperature loading" can be met.

●DRAWING



Unit:(mm)

φD	5	6.3	8	10	13	16	18
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5
φd	0.5			0.6		0.8	
β	1.0			2.0			
α	0.5						

▼ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

Freq.(HZ) Cap(μF)	60(50)	120	300	1K	10K
0.1~ 47	0.75	1.00	1.35	1.55	2.00
68 ~ 680	0.80	1.00	1.25	1.34	1.50
1000 ~22000	0.85	1.00	1.10	1.13	1.15

◆ PART NUMBERING SYSTEM

KM	□□□	□	□□□	□	□□
Series	Rated Cap.	Cap. Tolerance	Rated Voltage	Case Size D	Case Size L

KM Series

■STANDARD RATINGS

WV(Vdc) / Cap (μF)	6.3		10		16		25		35		50		63	
	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)
0.1											5X11	1.2	5X11	1.2
0.22											5X11	2.5	5X11	2.5
0.33											5X11	4	5X11	4
0.47											5X11	8	5X11	8
0.68											5X11	10	5X11	10
1											5X11	12	5X11	12
2.2											5X11	24	5X11	26
3.3											5X11	29	5X11	32
4.7											5X11	35	5X11	38
6.8											5X11	42	5X11	46
10											5X11	51	5X11	56
15											5X11	62	5X11	68
22											5X11	75	5X11	83
33											5X11	92	6.3X11	116
47									5X11	96	6.3X11	127	6.3X11	139
68							5X11	108	6.3X11	132	8X11.5	180	8X11.5	197
100					5X11	119	6.3X11	151	6.3X11	160	8X11.5	218	8X11.5	239
150			5X11	134	6.3X11	167	6.3X11	185	8X11.5	231	10X12.5	310	10X12.5	340
220	5X11	146	5X11	162	6.3X11	203	8X11.5	264	8X11.5	280	10X12.5	376	10X16	451
330	6.3X11	206	6.3X11	228	8X11.5	293	8X11.5	324	10X12.5	399	10X16	504	10X20	603
470	6.3X11	246	6.3X11	272	8X11.5	349	10X12.5	449	10X16	521	10X20	657	13X20	844
680	8X11.5	348	8X12	449	8X16	448	10X16	591	10X18 13X16	652 740	13X20	927	13X25	1107
1000	8X11.5	422	8X16	544	10X16	648	10X20	782	13X20	974	13X25	1226	16X25	1490
1500	10X16	621	10X16	680	13X16	862	13X20	1017	16X20	1188	16X25	1442	16X35.5	1770
2200	10X20	778	10X20	844	13X20	1055	13X25	1235	16X25	1426	16X35.5	1794		
3300	13X16	983	13X20	1148	13X25	1323	16X25	1562	16X35.5	1857	18X35.5	2152		
4700	13X20	1219	13X25	1421	16X25	1657	16X31.5	1916	18X35.5	2224				
6800	13X25	1480	16X25	1737	16X31.5	1982	18X35.5	2335						
10000	16X25	1807	16X35.5	2172	18X35.5	2409								
15000	16X35.5	2233	18X35.5	2482										
22000	18X40	2652												

WV(Vdc) / Cap (μF)	100		160		200		250		350		400		450	
	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)	ΦDxL (mm)	Ripple current (mArms)
0.1	5X11	2.5												
0.22	5X11	3.5												
0.33	5X11	5												
0.47	5X11	9	5X11	6	6.3X11	9	6.3X11	9						
1	5X11	13	5X11	9	6.3X11	13	6.3X11	13						
2.2	5X11	26	6.3X11	23	6.3X11	23	6.3X11	23	8X11.5	28	8X11.5	28	8X11.5	35
3.3	5X11	32	6.3X11	29	6.3X11	29	8X11.5	34	8X11.5	34	8X11.5	39	8X11.5	36
4.7	5X11	38	6.3x11	34	8X11.5	40	8X11.5	40	8X11.5	47	8X11.5	65	10X12	62
6.8	5X11	46	8X11.5	49	8X11.5	56	8X11.5	56	10X16	62	8X11.5	85	10X26	72
10	5X11	56	8X11.5	68	8X11.5	68	10X12.5	68	10X16	75	10X12	110	10X20	92
15	6.3X11	78	10X16	92	10X12.5	92	10X16	92	10X20	100	10X16	118	13X25	107
22	6.3X11	95	10X16	111	10X16	111	10X20	121	13X20	143	13X20	195	13X25	160
33	8X11.5	137	10X20	149	10X20	149	13X20	175	13X25	190	13X25	250	16X25	210
47	10X12.5	190	13X20	208	13X20	208	13X25	227	16X25	252	16X25	300	16X35.5	292
68	10X16	251	13X25	273	16X20	279	16X25	303	16X31.5	332	18X25	320	18X35.5	300
100	10X20	332	13X25	331	16X25	368	16X31.5	402			18X31.5	365	18X40	320
150	13X20	477	16X25	450	16X35.5	517	18X35.5	554			18X36	380		
220	13X25	630	16X31.5	596	18X31.5	671								
330	13X25	771	18X35.5	822	18X35.5	790								
470	16X25	1021	18X40	890	18X40	830								
680	16X31.5	1344												
1000	18X40	1925												

→ Rated Ripple Current (mArms) at 105℃ 120Hz

→ Case Size: ΦDxL (mm)