

KM series

Features

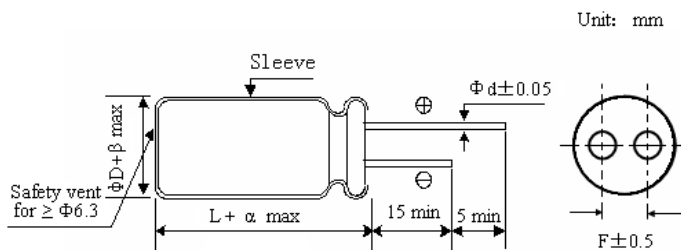
- ◆ Standard series for general purpose , 1000 to 2000 hours at 105°C.
- ◆ Rated working voltage range 6.3 to 100V DC/160 to 450V DC at operation temperature range -40 to +105°C/-25 to +105°C.
- ◆ This series is for communication equipments, switching power supply, industrial measuring instruments, automotive electric products, etc .
- ◆ RoHS Compliant .



Specifications

Item	Performance Characteristics											
Temperature Range	-40~+105°C	-25~+105°C										
Rated Voltage Range	6.3~100Vdc	160~450Vdc										
Capacitance Range	1.0~15000μF											
Capacitance Tolerance	±20% (120Hz, +20°C)											
Leakage Current (+20°C,max.)	$I \leq 0.01CV$ 或 $3 (\mu A)$	$I \leq 0.02CV + 30 (\mu A)$										
	After 2 minutes, whichever is greater measured with rated working voltage applied											
Dissipation Factor (tgδ) 120Hz, +20°C	Working Voltage(Vdc)	6.3 10 16 25 35 50 63 100 160~250 350~450										
	D.F (%) max.	26 22 18 16 14 12 10 8 15 20										
	For capacitance>1000μF , Add 2% per another 1000μF (120Hz, +20°C)											
Low Temperature Characteristics(120Hz)	Impedance ratio max.											
	Working Voltage(Vdc)	6.3	10	16	25	35	50	63	100	160~250	350~400	450
	Z-25°C/ Z+20°C	5	4	3	2	2	2	2	2	3	6	15
	Z-40°C/ Z+20°C	10	8	6	4	3	3	3	3	-	-	-
	For capacitance>1000μF , Add 0.5 per another 1000μF For Z-25°C/ Z+20°C, Add 1.0 per another 1000μF For Z-40°C/ Z+20°C											
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105°C(Φ5 to Φ6:1000hours)											
	Capacitance Change	≤±20% of the initial value										
	D.F.(tgδ)	≤200% of the initial specified value										
	Leakage Current	≤The initial specified value										
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C.											
Others	JISC-5101(IEC 60384)											

Diagram of Dimensions



Frequency Multipliers

μF	Hz	50	120	300	1K	10K~
		6.3~100WV	< 68	0.75	1.00	1.35
	68~470	0.80	1.00	1.23	1.34	1.50
	> 470	0.85	1.00	1.10	1.13	1.15
160~450WV	< 220	0.70	1.00	1.25	1.40	1.60
	220~330	0.75	1.00	1.10	1.13	1.15

ΦD	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8
α	(L < 20) + 1.5		(L ≥ 20) + 2.0				
β	(D < 20) + 0.5		(D ≥ 20) + 1.0				

KM series**Standard Ratings**

Voltage	6.3V		10V		16V		25V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
4.7							5×11	26
10					5×11	35	5×11	38
22			5×11	49	5×11	54	5×11	57
33	5×11	54	5×11	60	5×11	64	5×11	75
47	5×11	65	5×11	70	5×11	80	5×11	84
68	5×11	70	5×11	75	5×11	90	5×11	92
100	5×11	95	5×11	105	5×11	125	6.3×11	159
220	5×11	153	5×11	170	6.3×11	213	8×12	285
330	6.3×11	216	6.3×11	239	8×12	315	8×12	340
470	6.3×11	258	6.3×11	285	8×12	366	10×12	471
680	8×12	365	8×12	408	10×12	480	10×17	620
1000	8×12	443	10×12	571	10×15	680	10×20	821
2200	10×17	740	10×20	886	13×20	1108	13×25	1314
3300	10×20	1032	13×20	1205	13×25	1389	16×25	1646
4700	13×20	1280	13×25	1492	16×25	1740	16×30	2012
6800	13×25	1554	16×25	1824	16×30	2081	16×35	2308
10000	16×25	1897	16×30	1980	16×35	2379	18×35	2500
15000	16×30	2188	16×40	2280	18×35	2600		

Voltage	35V		50V		63V		100V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
1.0			5×11	13	5×11	16	5×11	16
2.2			5×11	20	5×11	23	5×11	23
3.3			5×11	30	5×11	34	5×11	34
4.7	5×11	28	5×11	37	5×11	40	5×11	40
10	5×11	41	5×11	54	5×11	59	6.3×11	61
22	5×11	67	5×11	79	5×11	79	6.3×12	92
33	5×11	80	5×11	101	6.3×11	122	8×12	144
47	5×11	101	6.3×11	133	6.3×11	146	10×12	199
68	6.3×11	160	8×12	200	8×12	155	10×17	240
100	6.3×11	168	8×12	229	10×12	251	10×20	349
220	8×12	294	10×15	509	10×20	504	13×25	662
330	10×12	419	10×17	589	13×20	688	13×25	800
470	10×17	547	10×20	707	13×20	810	16×25	990
680	10×20	682	13×20	923	13×25	1160	16×30	1289
1000	13×20	1023	13×25	1287	16×25	1448	18×40	2020
1500	13×25	1287	16×30	1405	18×30	1663		
2200	16×25	1497	16×35	1884	18×35	1781		
3300	16×30	1808	18×35	2167				
4700	18×35	2335						
6800	18×40	2400						

KM series

Standard Ratings

Voltage	160V		200V		250V		350V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
3.3					8×12	35	8×12	40
4.7	8×12	41	8×12	43	8×12	45	10×13	47
6.8	8×12	49	8×12	51	10×13	60	10×13	65
10	10×13	68	10×13	70	10×17	80	10×17	85
22	10×17	112	10×17	115	10×20	125	13×20	140
33	10×20	147	10×20	152	13×20	175	13×25	190
47	13×20	200	13×20	205	8×45	304	16×25	245
					13×25	230		
68	8×40	312	8×45	330	10×40	388	16×30	330
	13×25	250	13×25	268	16×25	294		
100	8×50	421	10×45	450	10×55	548	18×35	420
	13×25	320	16×25	345	16×30	380		
150	10×50	579	10×60	632	13×50	736	18×40	510
	16×25	425	16×30	444	18×30	460		
220	13×45	767	13×50	805	13×60	929		
	16×30	540	18×30	560	18×40	585		
330	13×60	1075	18×40	750				
	18×30	658						
	18×35	705						

Voltage	400V		420V		450V	
Cap(μF)	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
2.2	8×12	30			8×12	24
3.3	8×12	38			8×12	32
4.7	8×12	44			8×16	44
6.8	10×13	65			10×17	60
8.2	8×16	70				
10	10×17	80			10×20	90
22	8×40	190	8×45	201	8×50	214
	13×20	150			16×20	148
33	10×40	261	10×40	261	10×45	280
	16×20	205			16×25	195
47	10×50	347	10×55	363	13×40	363
	13×30	314				
	16×25	270	13×35	336	18×25	240
68	13×40	431	13×45	456	13×50	485
	18×25	350	18×30	345	18×30	320
100	13×55	607	18×35	450	13×62	650
	18×35	465			18×35	440
120	18×35	545	18×40	525	18×45	510
150	18×40	646	18×45	570		
180	18×45	750				

Max Allowable Ripple Current (mA, rms) at 105°C 120Hz, Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.