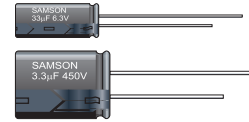


SKM Series

+105°C, Standard(標準品)

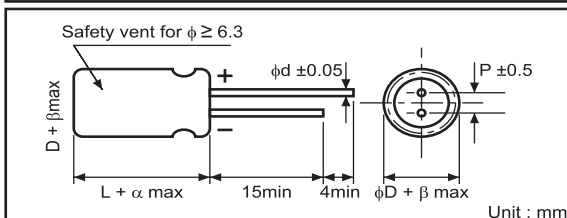
FEATURES

1. 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.
2. This series is for communication equipments, switching power supply, industrial measuring instruments, automotive electric products, etc.



SPECIFICATIONS										
Item	Performance Characteristics									
Operating Temperature Range	-40 to +105°C -25 to +105°C									
Rated Working Voltage Range	6.3 to 100V 160 to 450V									
Nominal Capacitance Range	0.1 to 33000µF									
Capacitance Tolerance	±20% (120Hz, +20°C)									
Leakage Current	$I \leq 0.01CV$ or $3(\mu A)$ $I \leq 0.03CV + 40(\mu A)$ whichever is greater measured after 1 minute application after 1 minute application of rated working voltage at +20°C of rated working voltage at +20°C									
Dissipation Factor $\tan \delta$ (120Hz, +20°C)	Working Voltage (V)	6.3	10	16	25	35	50	63	100	
	$\tan \delta$ (max.)	0.26	0.22	0.18	0.16	0.14	0.12	0.10	0.08	
	Working Voltage (V)	160	200	220	250	350	400	420	450	
	$\tan \delta$ (max.)	0.20	0.20	0.20	0.20	0.24	0.24	0.24	0.24	
For capacitance value > 1000µF, add 0.02 per another 1000µF										
Low Temperature Characteristics	Impedance ratio max. at 120Hz									
	Working Voltage (V)	6.3	10	16	25	35	50	63	100	
	Z-25°C / Z+20°C	5	4	3	2	2	2	2	2	
	Z-40°C / Z+20°C	10	8	6	4	3	3	3	3	
	Working Voltage (V)	160	200	220	250	350	400	420	450	
Z-25°C / Z+20°C	3	3	3	4	4	6	6	15		
For capacitance value > 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										
High Temperature Loading	Test conditions	ϕD	≤ 8	≥ 10	Post test requirements at +20°C					
	Duration	Load life	2000h	3000h	Leakage current : \leq Initial specified value					
	Ambient temp.	: +105°C			Cap. change : within $\pm 20\%$ of initial measured value					
Applied voltage	: DC voltage with maximum permissible ripple current specified at +105°C (Sum of the DC voltage and super-imposed peak AC voltage for maximum permissible ripple current should be equal to rated DC working voltage).			tan δ : $\leq 200\%$ of initial specified value						
Shelf Life	Test conditions	Post test requirements at +20°C								
	Duration	: 1000 hours								
	Ambient temp.	: +105°C								
Applied voltage	: (None)									
Others	JIS C - 5141 JIS C - 5102									

CASE SIZE TABLE



ϕD	5	6.3	8	10	12.5	16	18		
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5		
ϕd	0.5			0.6			0.8		
α	(L < 20) 1.5				(L \geq 20) 2.0				
β	(D < 20) 0.5				(D \geq 20) 1.0				

RIPPLE CURRENT MULTIPLIER

Temperature Coefficient					
Temperature(°C)	~ 55	60	70	85	105
Factor	2.23	2.17	2.00	1.75	1.00

Frequency Coefficient						
Rated Voltage(V)	Cap(µF)	Freq.(Hz)				
		50	120	300	1K	10K~
6.3 ~ 100	~ 47	0.75	1.00	1.35	1.57	2.00
	100 ~ 470	0.80	1.00	1.23	1.34	1.50
	≥ 560	0.85	1.00	1.10	1.13	1.15
160 ~ 450	0.47 ~ 220	0.80	1.00	1.25	1.40	1.60
	≥ 270	0.90	1.00	1.10	1.13	1.15

SAMSON

SKM Series

+105°C, Standard(標準品)

DIMENSIONS									
Voltage (Code)		6.3V		10V		16V		25V	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.1	104								
0.15	154								
0.22	224								
0.33	334								
0.47	474								
1	105								
2.2	225								
3.3	335								
4.7	475							5 x 11	25
10	106					5 x 11	35	5 x 11	37
22	226			5 x 11	48	5 x 11	53	5 x 11	56
33	336	5 x 11	52	5 x 11	56	5 x 11	60	5 x 11	75
47	476	5 x 11	61	5 x 11	66	5 x 11	80	5 x 11	84
68	686	5 x 11	70	5 x 11	75	5 x 11	90	5 x 11	92
100	107	5 x 11	94	5 x 11	105	5 x 11	125	6.3 x 11	159
220	227	5 x 11	153	6.3 x 11	193	6.3 x 11	213	6.3 x 11	255
330	337	6.3 x 11	216	6.3 x 11	239	8 x 12	315	8 x 12	285
470	477	6.3 x 11	258	6.3 x 11	285	8 x 12	366	8 x 12	359
								8 x 14	
								8 x 16	
								10 x 12.5	
								10 x 16	
8 x 12	471								
8 x 14									
8 x 16	620								
10 x 12.5									
10 x 16									
8 x 12	443								
8 x 16									
10 x 12.5	571								
8 x 16		520							
10 x 12.5	568								
10 x 16		680							
10 x 20	817								
10 x 20		1032							
12.5 x 20	1280								
12.5 x 25		1554							
16 x 25	1897								
16 x 30		2344							
16 x 35	2500								
18 x 40		2180							
18 x 35	2268								
18 x 35		2400							
18 x 40	2555								
18 x 40		2555							

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size φD x L(mm)

Voltage (Code)		35V		50V		63V		100V	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.1	104			5 x 11	1				
0.15	154			5 x 11	1.5				
0.22	224			5 x 11	2.5				
0.33	334			5 x 11	4				
0.47	474			5 x 11	7			5 x 11	8
1	105			5 x 11	13			5 x 11	16
2.2	225			5 x 11	20			5 x 11	21
3.3	335			5 x 11	30			5 x 11	34
4.7	475	5 x 11	27	5 x 11	37			5 x 11	40
10	106	5 x 11	40	5 x 11	54	5 x 11	59	6.3 x 11	61
22	226	5 x 11	67	5 x 11	79	6.3 x 11	87	8 x 12	110
33	336	5 x 11	80	6.3 x 11	115	6.3 x 11	122	8 x 12	144
47	476	5 x 11	101	6.3 x 11	155	6.3 x 11	146	10 x 12.5	199
		6.3 x 11	120						
68	686					8 x 12	155	10 x 12.5	220
100	107	6.3 x 11	168	8 x 12	229	10 x 12.5	251	10 x 20	349
220	227	8 x 12	294	10 x 16	509	10 x 20	504	12.5 x 25	662
330	337	10 x 12.5	419	10 x 20	650	12.5 x 20	688	12.5 x 25	800
470	477	10 x 16	547	12.5 x 20	801	12.5 x 25	897	16 x 30	1072
680	687	10 x 20	682	12.5 x 20	923	12.5 x 25	1160	18 x 35	1125
1000	108	12.5 x 20	1023	12.5 x 25	1287	16 x 30	1568	18 x 40	2020
2200	228	16 x 25	1497	16 x 35	1884	18 x 40	1890		
3300	338	16 x 30	1808	18 x 40	2300				
4700	478	18 x 35	2335						
6800	688	18 x 40	2400						

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size φD x L(mm)

SKM Series

+105°C, Standard(標準品)

DIMENSIONS									
Voltage (Code)		160V		200V		220V		250V	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.47	474							6.3 x 11	8
1	105							6.3 x 11	17
2.2	225							6.3 x 11	27
3.3	335			6.3 x 11	30	6.3 x 11	30	6.3 x 11	35
4.7	475	6.3 x 11	41	6.3 x 11	40	8 x 12	40	8 x 12	45
10	106	8 x 12	60	10 x 12.5	72	10 x 12.5	70	10 x 12.5	75
22	226	10 x 16	110	10 x 20	105	10 x 20	125	10 x 20	130
33	336	10 x 20	156	10 x 20	165	12.5 x 20	165	12.5 x 20	184
47	476	10 x 20	195	12.5 x 20	220	12.5 x 20	220	12.5 x 25	238
68	686	12.5 x 20	250	12.5 x 25	250	12.5 x 25	245	16 x 25	270
82	828	12.5 x 25	310	10 x 30	320	12.5 x 30	280	16 x 30	380
100	107	12.5 x 25	360	16 x 25	386	16 x 25	335	16 x 30	422
150	157	12.5 x 30	380	12.5 x 30	496	16 x 30	365	18 x 30	440
180	187	12.5 x 35	420	12.5 x 35	560	16 x 35	500	18 x 35	469
220	227	16 x 30	680	16 x 35	580	16 x 40	615	18 x 35	485
				12.5 x 40	640				
270	277	16 x 30	728	16 x 30	696				
330	337	18 x 35	830	16 x 35	808				
				18 x 30	808				
390	397	18 x 35	850	16 x 40	904				
				18 x 35	904				
470	477	18 x 40	880	18 x 40	1016				
560	567	18 x 45	925	18 x 45	1112				

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size φD x L(mm)

Voltage (Code)		350V		400V		420V		450V	
Cap.(μF)	Code	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current	Case Size	Ripple Current
0.47	474	6.3 x 11	8						
1	105	6.3 x 11	18	6.3 x 11	19	6.3 x 11	15	6.3 x 11	16
2.2	225	6.3 x 11	25	6.3 x 11	30	8 x 12	29	10 x 12.5	28
				8 x 12					
3.3	335	8 x 12	40	6 x 14	41	10 x 12.5	40	10 x 12.5	33
				8 x 12					
				10 x 12.5					
4.7	475	10 x 12.5	50	8 x 12	48	10 x 16	52	10 x 12.5	42
				10 x 12.5					
				10 x 16					
6.8	685			8 x 16	63				
				10 x 12.5					
				10 x 16					
10	106	10 x 16	80	10 x 16	86	10 x 20	85	10 x 20	84
		10 x 20		10 x 20					
18	186	12.5 x 20	100	12.5 x 20	105	12.5 x 25	124	10 x 30	108
22	226	12.5 x 20	150	12.5 x 20	163	10 x 30	160	16 x 25	151
				12.5 x 25					
				16 x 22					
27	276	12.5 x 25	177	10 x 30	192	12.5 x 25	170	12.5 x 30	164
33	336	16 x 25	200	12.5 x 20	206	16 x 25	200	10 x 30	203
				12.5 x 25					
				16 x 22	222			12.5 x 30	224
				16 x 25					
39	396	16 x 25	258	16 x 25	251	12.5 x 30	248	12.5 x 35	256
47	476	16 x 25	265	12.5 x 25	243	12.5 x 35	288	12.5 x 40	304
				16 x 22					
				16 x 25	265	16 x 35	270	16 x 35	254
				16 x 30					
56	566	16 x 30	280	12.5 x 35	336	12.5 x 40	344	16 x 30	352
68	686	16 x 30	288	16 x 32	384	16 x 30	408	18 x 35	392
				18 x 25					
82	826	18 x 30	372	18 x 30	280	16 x 35	456	16x40/18x30	440
100	107	18 x 35	460	18 x 35	310	16 x 40	488	18 x 40	470
				16 x 30	464	18 x 30	488	18 x 35	520
120	127			18 x 30	536	18 x 35	528	18 x 40	592
150	157			18 x 35	616	18 x 40	568	18 x 45	640
180	187			18 x 40	704				
220	227			18 x 45	800				

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz

Case Size φD x L(mm)