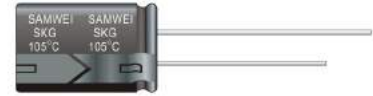


SKG SERIES -55°C~ +105°C(標準品)

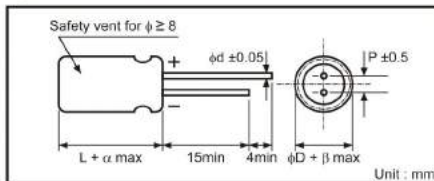


- For general purpose, -55°C to +105°C, 1000 to 2000 hours.
- Wide CV value range.

◆ SPECIFICATIONS

Item	Performance Characteristics																											
Operating temperature range	-55 to +105°C	-25 to +105°C																										
Rated Working Voltage Range	6.3 to 100V	160 to 450V																										
Nominal Capacitance Range	0.1 to 22000μF	1.0 to 330μF																										
Capacitance Tolerance	±20(120Hz, +20°C)																											
Leakage Current	$I \leq 0.01CV$ or $3(\mu A)$ after 2 minutes whichever is greater measured with rated working voltage applied at +20°C	$I \leq 0.03CV + 10(\mu A)$ after 2 minutes application of rated working voltage at +20°C																										
Dissipation Factor tan δ(120Hz, +20°C)	<table border="1"> <tr> <th>Working Voltage(V)</th> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <th>tan δ(max)</th> <td>0.28</td> <td>0.24</td> <td>0.2</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.1</td> <td>0.08</td> </tr> </table>	Working Voltage(V)	6.3	10	16	25	35	50	63	100	tan δ(max)	0.28	0.24	0.2	0.16	0.14	0.12	0.1	0.08									
	Working Voltage(V)	6.3	10	16	25	35	50	63	100																			
tan δ(max)	0.28	0.24	0.2	0.16	0.14	0.12	0.1	0.08																				
	<table border="1"> <tr> <th>Working Voltage(V)</th> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <th>tan δ(max)</th> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.2</td> <td>0.24</td> <td>0.24</td> </tr> </table>	Working Voltage(V)	160	200	250	350	400	450	tan δ(max)	0.15	0.15	0.15	0.2	0.24	0.24	For capacitance value > 1000μF, add 0.02 per another 1000μF												
Working Voltage(V)	160	200	250	350	400	450																						
tan δ(max)	0.15	0.15	0.15	0.2	0.24	0.24																						
Low Temperature Characteristics	Impedance ratio max at 120Hz																											
	<table border="1"> <tr> <th>Working Voltage(V)</th> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> </tr> <tr> <th>Z-25°C/Z+20°C</th> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <th>Z-40°C/Z+20°C</th> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	Working Voltage(V)	6.3	10	16	25	35	50	63	100	Z-25°C/Z+20°C	4	3	2	2	2	2	2	2	Z-40°C/Z+20°C	10	8	6	4	3	3	3	3
Working Voltage(V)	6.3	10	16	25	35	50	63	100																				
Z-25°C/Z+20°C	4	3	2	2	2	2	2	2																				
Z-40°C/Z+20°C	10	8	6	4	3	3	3	3																				
	<table border="1"> <tr> <th>Working Voltage(V)</th> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <th>Z-25°C/Z+20°C</th> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> </table>	Working Voltage(V)	160	200	250	350	400	450	Z-25°C/Z+20°C	2	2	2	2	2	2	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												
Working Voltage(V)	160	200	250	350	400	450																						
Z-25°C/Z+20°C	2	2	2	2	2	2																						
High Temperature Loading	Test conditions																											
	<table border="1"> <tr> <th>Duration</th> <th>WV</th> <td>6.3 to 100</td> <td>160 to 450</td> </tr> <tr> <th>ΦD</th> <td>5-8</td> <td>10-18</td> <td></td> </tr> <tr> <th>Life</th> <td>1000</td> <td>2000</td> <td>2000</td> </tr> </table>	Duration	WV	6.3 to 100	160 to 450	ΦD	5-8	10-18		Life	1000	2000	2000	Post test requirements at +20°C Leakage current : ≤ Initial specified value Cap . Change : ≤ ±20% of Initial measured value tan δ : ≤ 200% of Initial specified value														
Duration	WV	6.3 to 100	160 to 450																									
ΦD	5-8	10-18																										
Life	1000	2000	2000																									
	Ambient temp : +105°C Applied voltage: Rated DC working voltage with max. ripple current.																											
Shelf Life	Test conditions																											
	Duration : 1000 hours Ambient temp : +105°C Applied voltage: (None)	Post test requirements at +20°C Leakage current : ≤ Initial specified value Cap . Change : ≤ ±20% of Initial measured value tan δ : ≤ 200% of Initial specified value																										

◆ CASE SIZE TABLE



φD	5	6.3	8	10	13	16	18	22	25
P	2.0	2.5	3.5	5.0	5.0	7.5	7.5	10.0	12.5
φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8	0.8	1.0
α	(L < 20) 1.5				(L ≥ 20) 2.0				
β	(D < 20) 0.5				(D ≥ 20) 1.0				

◆ RIPPLE CURRENT MULTIPLIER

(1) Frequency Coefficient

Rated Voltage(V)	cap(μf)	freq. (Hz)				
		60	120	1k	10k	100k
6.3~100	≤ 47	0.75	1	1.55	1.8	2
	56~470	0.8	1	1.35	1.5	1.5
	≥ 560	0.85	1	1.1	1.15	1.15
160~450	0.47~220	0.8	1	1.35	1.5	1.5
	> 220	0.8	1	1.35	1.5	1.5

(2) Temperature Coefficient

Temperature	-55	60	70	85	105
FACTOR	2.23	2.17	2	1.75	1

SKG SERIES -55°C~ +105°C(標準品)

◆ DIMENSIONS

Voltage	6.3V		10V		16V		25V	
Cap(μF)	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
33							5*11	91
47					5*11	110	6.3*11	130
100					6.3*11	180	8*12	230
220	5*11	140	6.3*11	200	8*12	260	8*12	310
330			8*12	250	8*12	310	10*12.5	380
470	6.3*11	230	10*12.5	460	10*16	560	10*20	680
1000	8*11	380	10*20	760	12.5*20	920	12.5*25	1090
2200	10*16	710	12.5*20	1000	12.5*25	1170	16*25	1400
3300	10*20	840	12.5*25	1260	16*25	1480	16*30	1750
4700	12.5*20	1090	16*25	1570	16*30	1780	18*35	2040
6800	12.5*25	1350	16*30	1890	18*35	2060		
10000	16*25	1650	18*35	2180				
15000	16*30	2010						
22000	18*35	2350						

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

Case Size ΦD X L (mm)

Voltage	35V		50V		63V		100V	
Cap(μF)	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1			5*11	1.3				
0.22			5*11	2.3				
0.33			5*11	3.5				
0.47			5*11	5			5*11	9
1			5*11	10			5*11	14
2.2			5*11	18			5*11	21
3.3			5*11	22			5*11	31
4.7			5*11	26			5*11	38
10			5*11	39	5*11	48	6.3*11	54
22			5*11	65	5*11	71	6.3*11	93
33			5*11	90	6.3*11	100	8*12	130
47	5*11	90	6.3*11	110	6.3*11	120	10*12.5	165
100	6.3*11	150	8*12	180	10*12.5	215	10*20	265
220	8*12	270	10*12.5	300	10*16	335	12.5*25	440
330	10*12.5	350	10*16	410	10*20	510	16*25	540
470	10*16	480	10*20	530	12.5*20	640	16*25	715
1000	12.5*20	810	12.5*25	950	16*25	930	18*35	985
2200	16*25	1260	16*30	1470	18*35	1610		
3300	16*30	1610	18*35	1770				
4700	18*35	1910						

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

Case Size ΦD X L (mm)

SKG SERIES -55°C~ +105°C(標準品)

◆ DIMENSIONS

Voltage	160V		200V		250V		350V	
Cap(μF)	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1	6.3*11	17	6.3*11	17	6.3*11	17	6.3*11	18
2.2	6.3*11	25	6.3*11	25	6.3*11	29	8*12	31
3.3	6.3*11	36	6.3*11	36	8*12	42	10*12.5	38
4.7	6.3*11	43	8*12	50	8*12	50	10*16	50
10	10*12.5	70	10*16	80	10*16	88	10*20	82
22	10*20	130	10*20	140	12.5*20	155	12.5*20	130
33	10*20	180	12.5*20	190	12.5*20	190	16*25	195
47	12.5*20	220	12.5*20	220	12.5*25	230	16*25	230
100	16*25	335	16*25	335	16*30	365	18*30	375
220	16*30	540	16*30	575				
330	18*30	705						

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

Case Size ΦD X L (mm)

Voltage	400V		450V					
Cap(μF)	Size	Ripple	Size	Ripple				
1	6.3*11	18	8*12	18				
2.2	8*12	30	10*12.5	29				
3.3	10*12.5	40	10*16	41				
4.7	10*16	50	10*20	49				
10	10*20	80	12.5*20	75				
22	12.5*25	145	16*25	115				
33	16*25	195	16*30	155				
47	16*30	250						

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

Case Size ΦD X L (mm)