

SGV SERIES

105°C Long Life, Lead Free Reflow Soldering.

◆ FEATURES

- Load Life : 105°C 2000 hours.
- Lead free reflow soldering is available.
- Available for high density mounting.
- RoHS compliance.



◆ SPECIFICATIONS

Items	Characteristics																												
Category Temperature Range	-55~ +105°C	-40~ +105°C																											
Rated Voltage Range	6.3~ 50V.DC	63 , 100V.DC																											
Capacitance Tolerance	±20% (20°C, 120Hz)																												
Leakage Current(MAX)	I=0.01CV or 3 μA whichever is greater. (After 2 minutes application of rated voltage) I=Leakage Current(μA) C=Rated Capacitance(μF) V=Rated Voltage(V)																												
(tanδ) Dissipation Factor(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>φ4φ5φ6.3×6.1</td> <td>0.30</td> <td>0.24</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>-</td> <td>-</td> </tr> <tr> <td>φ6.3×8φ8~φ18</td> <td>0.35</td> <td>0.26</td> <td>0.24</td> <td>0.18</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> </tr> </tbody> </table>	Rated Voltage(V)	6.3	10	16	25	35	50	63	100	φ4φ5φ6.3×6.1	0.30	0.24	0.20	0.16	0.14	0.12	-	-	φ6.3×8φ8~φ18	0.35	0.26	0.24	0.18	0.14	0.12	0.12	0.10	(20°C, 120Hz)
Rated Voltage(V)	6.3	10	16	25	35	50	63	100																					
φ4φ5φ6.3×6.1	0.30	0.24	0.20	0.16	0.14	0.12	-	-																					
φ6.3×8φ8~φ18	0.35	0.26	0.24	0.18	0.14	0.12	0.12	0.10																					
Endurance	After applying rated voltage with rated ripple current for 2000 hrs at 105°C, the capacitors shall meet the following requirements.																												
	Capacitance Change	Within ±25% of the initial value.																											
	Dissipation Factor	Not more than 200% of the specified value.																											
	Leakage Current	Not more than the specified value.																											
Low Temperature Stability Impedance Ratio(MAX)	<table border="1"> <thead> <tr> <th>Rated Voltage(V)</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Z(-25°C)/Z(20°C)</td> <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> <td>Z(-40°C)/Z(20°C)</td> <td>8</td> <td>8</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> <td>5</td> <td>5</td> </tr> </tbody> </table>	Rated 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)	8	8	4	4	3	3	5	5	(120Hz)
Rated 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)	8	8	4	4	3	3	5	5																					

◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

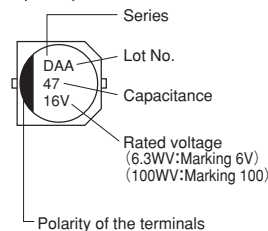
Frequency (Hz)	60 (50)	120	500	1k	10k ≤
0.1~1 μF	0.50	1.00	1.20	1.30	1.50
2.2~4.7 μF	0.65	1.00	1.20	1.30	1.50
10~47 μF	0.80	1.00	1.20	1.30	1.50
100~1000 μF	0.80	1.00	1.10	1.15	1.20
2200~6800 μF	0.80	1.00	1.05	1.10	1.15

◆ PART NUMBER

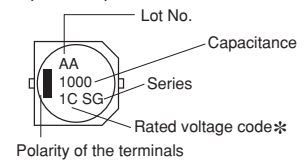
□□□ / SGV / □□□□□ / □ / □□□ / □□ / DXL  
 Rated Voltage    Series    Rated Capacitance    Capacitance Tolerance    Option    Lead Forming    Case Size

◆ MARKING

<φ 4~φ 10 >



<φ 12.5~φ 18 >

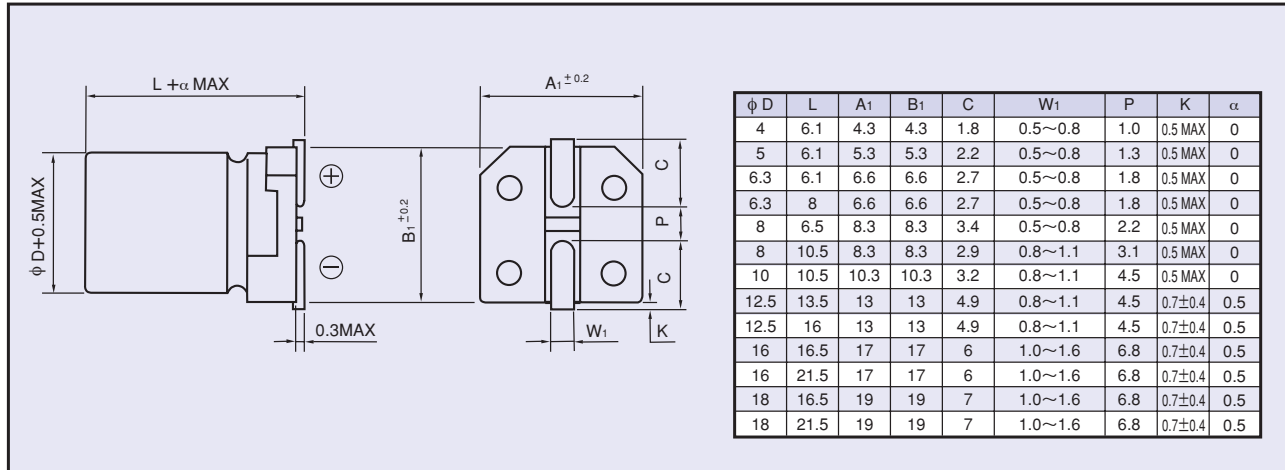


\* Voltage code

Rated Voltage (V)	6.3	10	16	25	35	50	63	100
Rated Voltage code	0J	1A	1C	1E	1V	1H	1J	2A

◆ DIMENSIONS

(mm)



◆ STANDARD SIZE

Size φ D×L(mm), Ripple Current (mA r.m.s./105°C, 120Hz)

Cap(μF)	WV (V.DC)	6.3 (0J)		10 (1A)		16 (1C)		25 (1E)		35 (1V)		50 (1H)		63 (1J)		100 (2A)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1												4×6.1	1.0				
0.22												4×6.1	2.6				
0.33												4×6.1	3.2				
0.47												4×6.1	4.0				
1												4×6.1	8.0				
2.2												4×6.1	11				
3.3												4×6.1	14				
4.7										4×6.1	15	5×6.1	19			8×10.5	55
10						4×6.1	28			5×6.1	28	6.3×6.1	35			8×10.5	65
22		4×6.1	26			5×6.1	39			6.3×6.1	55	6.3×8 8×6.5	67 70	8×10.5	55	10×10.5	90
33		4×6.1	29	5×6.1	43			6.3×6.1	65	6.3×8 8×6.5	76 84	8×10.5	140	8×10.5	115	10×10.5	135
47		5×6.1	46			6.3×6.1	70	6.3×8 8×6.5	79 91			8×10.5 10×10.5	167 180	8×10.5	120	12.5×13.5	160
100		6.3×6.1	71	6.3×6.1	71	6.3×8	111	8×10.5	180	8×10.5 10×10.5	180 305	8×10.5 10×10.5	230 315	12.5×16	225	16×16.5	285
220		6.3×8	121			8×10.5	185	8×10.5 10×10.5	320 355	10×10.5 12.5×13.5	450	12.5×16	380	16×16.5	385	16×21.5 18×16.5	440
330				8×10.5	195	8×10.5 10×10.5	290 440	10×10.5 12.5×13.5	450	12.5×16	460	16×16.5	470	16×21.5 18×16.5	490		
470		8×10.5	210	8×10.5 10×10.5	210 440	8×10.5 10×10.5	320 460	10×10.5	490	16×16.5	490	16×21.5 18×16.5	550	18×21.5	590		
1000		10×10.5 12.5×13.5	495	12.5×16	500	16×16.5	630	16×21.5 18×16.5	700	16×21.5 18×16.5	750	18×21.5	820				
2200		12.5×16	750	16×16.5	810	16×21.5 18×16.5	930	18×21.5	1050								
3300		16×21.5 18×16.5	930	16×21.5 18×16.5	1000	18×21.5	1150	18×21.5	1700								
4700		18×21.5	1200	18×21.5	1200												
6800		18×21.5	1350														