

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>tan δ</td> <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> </tr> <tr> <td></td> <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>0.10</td> </tr> </tbody> </table> <p>(20°C, 120Hz)</p> <p>When rated capacitance is over 1000 μF, tan δ shall be added 0.02 to the listed value with increase of every 1000 μF.</p>		Rated Voltage(V)	6.3	10	16	25	35	50	63	100	tan δ	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	0.10
Rated Voltage(V)	6.3	10	16	25	35	50	63	100																					
tan δ	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	0.10																					
Endurance	<p>After applying rated voltage with rated ripple current for 2000 hrs at 105°C, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> </tr> <tr> <td>Dissipation Factor</td> <td>Not more than 200% of the specified value.</td> </tr> <tr> <td>Leakage Current</td> <td>Not more than the specified value.</td> </tr> </table>		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.																					
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> <p>(120Hz)</p>		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
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																					

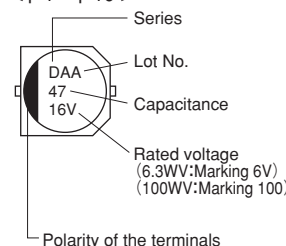
◆ MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

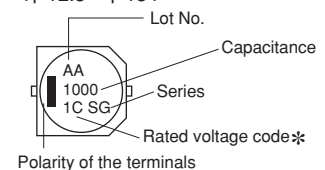
Frequency (Hz)	60(50)	120	500	1k	10k ≤	
Coefficient	0.1~1 μF	0.50	1.00	1.20	1.30	1.50
	2.2~4.7 μF	0.65	1.00	1.20	1.30	1.50
	10~47 μF	0.80	1.00	1.20	1.30	1.50
	100~1000 μF	0.80	1.00	1.10	1.15	1.20
	2200~6800 μF	0.80	1.00	1.05	1.10	1.15

◆ 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

◆ PART NUMBER

□□□	SGV	□□□□□	□
Rated Voltage	Series	Rated Capacitance	Capacitance Tolerance

□□□	□□
Option	Lead Forming

DXL
Case Size

