

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(μ A) C=Rated Capacitance(μ F) V=Rated Voltage(V)																												
Dissipation Factor(MAX) (tan δ)	<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>φ4, φ5, φ6.3×6.1</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>φ6.3×8, φ8~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> (20°C, 120Hz)	Rated Voltage (V)	6.3	10	16	25	35	50	63	100	φ4, φ5, φ6.3×6.1	0.30	0.24	0.20	0.16	0.14	0.12	—	—	φ6.3×8, φ8~φ18	0.35	0.26	0.24	0.18	0.14	0.12	0.12	0.10	When rated capacitance is over 1000 μF, tan δ shall be added 0.02 to the listed value with increase of every 1000 μF.
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Endurance	After applying rated voltage with rated ripple current for 2000 hrs at 105°C, the capacitors shall meet the following requirements. <table border="1"> <tbody> <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> </tbody> </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.																					
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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> (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	
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	Case Size

◆MARKING

〈 φ 4 ~ φ 6.3, φ 8 × 6.5 〉 〈 φ 8 × 10.5, φ 10 ~ φ 18 〉



