

SGV SERIES
105°C Standard, 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 3μA whichever is greater. (After 2 minutes application of rated voltage) | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | I=(μA) Leakage Current | C=(μF) Rated Capacitance | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | V=(V) Rated Voltage | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (tanδ) Dissipation Factor(MAX) | <table border="1"> <thead> <tr> <th>Rated Voltage</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 | 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 |
| Rated Voltage | 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 1000μF, tanδ shall be added 0.02 to the listed value with increase of every 1000μF. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Endurance | After applying rated voltage with rated ripple current for 2000 hours 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. | | | | | | | | | | | | | | | | | | | | | |
| 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</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 | 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 | 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

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

◆PART NUMBER

| | | | | | |
|---------------|--------|-------------------|-----------------------|--------|-----------|
| □□□ | SGV | □□□□□ | M | □□□ | D×L |
| Rated Voltage | Series | Rated Capacitance | Capacitance Tolerance | Option | Case Size |

◆MARKING


