

SGV シリーズ  
SERIES

UPGRADE

105°C 標準品  
105°C Standard

・105°C 2000~5000時間品。  
Load Life : 105°C 2000~5000 hours.

RoHS  
compliance

・AEC-Q200対応可。  
AEC-Q200.

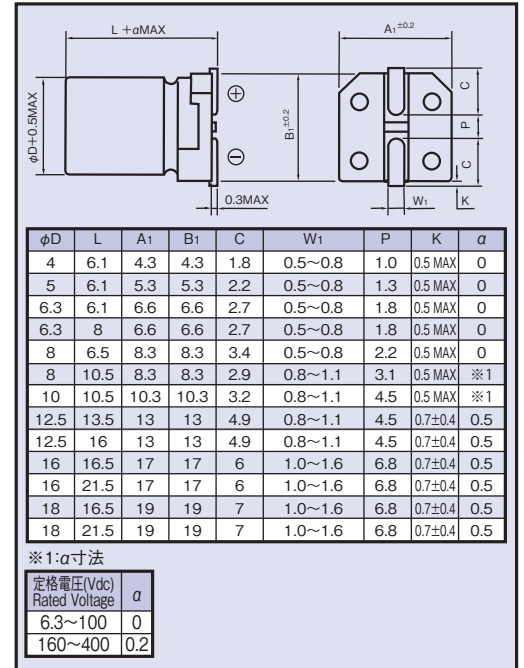
・高温リフローはんだ付け対応可能。(JGVシリーズ)  
High Temperature Reflow soldering is available. (JGV series)  
(http://www.rubycon.co.jp/catalog/j\_pdfs/aluminum/j\_JGV.pdf)



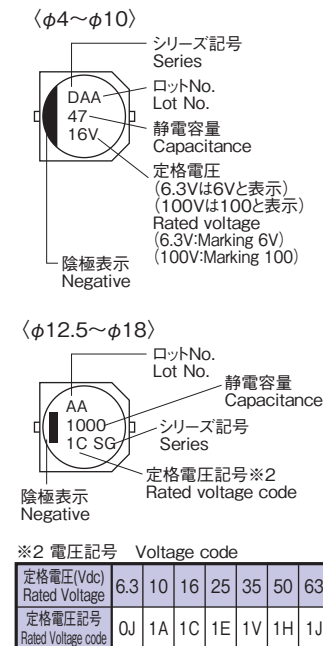
◆規格表 / SPECIFICATIONS

| 項目  | Items   | 特性   |  |                              | Characteristics   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
|---|---|--|--|------------------------------|---|------|------|----------------------------|------|----------------------------|----------------------|----------------------------|---------------|----|----|-----|-------------|------------|---------------|------|----------------|------------|---------|------------------|------|------|------|---|---|---|---|---|---------------|------|------|------------------|------|------|------|------|------|------|---|---|---|---|--|
| カテゴリ温度範囲  | Category Temperature Range                                      | -55~+105°C   | -40~+105°C   | -25~+105°C                   |   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 定格電圧範囲  | Rated Voltage Range   | 6.3~50Vdc  | 63, 100Vdc   | 160~450Vdc                   |   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 静電容量許容差   | Capacitance Tolerance   | ±20% (20°C, 120Hz)   |  |                              |   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 漏れ電流  | Leakage Current(MAX)  | 6.3~100Vdc   |  |                              | 160~450Vdc  |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
|   |   | I=0.01CV又は3µAのいずれか大なる値以下<br>I=0.01CV or 3µA whichever is greater.<br>(定格電圧印加2分後)<br>(After 2 minutes application of rated voltage)   |  |                              | I=0.04CV+100µA以下(1分値)<br>I=0.04CV+100µA (1minute)<br>I=0.02CV+25µA以下(5分値)<br>I=0.02CV+25µA (5minutes) |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
|   |   | I=漏れ電流(µA)<br>Leakage Current  | C=静電容量(µF)<br>Capacitance                                | V=定格電圧(Vdc)<br>Rated Voltage |   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 損失角の正接  | Dissipation Factor(MAX)   | <table border="1"> <tr> <th>定格電圧(Vdc)<br/>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> <th>160<br/>~250</th> <th>400<br/>450</th> <th>(20°C, 120Hz)</th> </tr> <tr> <td>tanδ</td> <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> <td>-</td> <td>-</td> </tr> <tr> <td></td> <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>0.10</td> <td>0.15</td> <td>0.20</td> <td></td> </tr> </table> |  |                              |   |      |      | 定格電圧(Vdc)<br>Rated Voltage | 6.3  | 10                         | 16                   | 25                         | 35            | 50 | 63 | 100 | 160<br>~250 | 400<br>450 | (20°C, 120Hz) | tanδ | 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 | 0.10 | 0.15 | 0.20 |   |   |   |   |  |
|   |   | 定格電圧(Vdc)<br>Rated Voltage   | 6.3  | 10                           | 16  | 25   | 35   | 50                         | 63   | 100                        | 160<br>~250          | 400<br>450                 | (20°C, 120Hz) |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| tanδ  | 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 | 0.10                       | 0.15 | 0.20                       |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 1000µFを越えるものは1000µF増す毎に上表の値に0.02を加えた値とする。<br>When rated capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF. |   |  |  |                              |   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 耐久性   | Endurance   | 105°C中で右表の時間定格電圧(リプル重量)印加後、下記項目を満足すること。<br>After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.   |  |                              |   |      |      |                            |      |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
|   |   | 静電容量変化率<br>Capacitance Change  | 初期値の±25%以内<br>Within ±25% of the initial value.          |                              |   |      |      |                            |      | 定格電圧(Vdc)<br>Rated Voltage | 時間(hrs)<br>Life Time |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
|   |   | 損失角の正接<br>Dissipation Factor   | 規格値の200%以下<br>Not more than 200% of the specified value. |                              |   |      |      |                            |      | 6.3~100                    | 2000                 |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
|   |   |  |  |                              |   |      |      | 160~450                    | 5000 |                            |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| 低温特性  | Low Temperature Stability<br>(インピーダンス比)<br>Impedance Ratio(MAX) | <table border="1"> <tr> <th>定格電圧(Vdc)<br/>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> <th>160<br/>~250</th> <th>400<br/>450</th> <th>(120Hz)</th> </tr> <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> <td>3</td> <td>6</td> <td></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> <td>-</td> <td>-</td> <td></td> </tr> </table>  |  |                              |   |      |      |                            |      |                            |                      | 定格電圧(Vdc)<br>Rated Voltage | 6.3           | 10 | 16 | 25  | 35          | 50         | 63            | 100  | 160<br>~250    | 400<br>450 | (120Hz) | Z(-25°C)/Z(20°C) | 4    | 3    | 2    | 2 | 2 | 2 | 2 | 2 | 3             | 6    |      | Z(-40°C)/Z(20°C) | 8    | 8    | 4    | 4    | 3    | 3    | 5 | 5 | - | - |  |
|   |   | 定格電圧(Vdc)<br>Rated Voltage   | 6.3  | 10                           | 16  | 25   | 35   | 50                         | 63   | 100                        | 160<br>~250          | 400<br>450                 | (120Hz)       |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| Z(-25°C)/Z(20°C)  | 4   | 3  | 2  | 2                            | 2   | 2    | 2    | 2                          | 3    | 6                          |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |
| Z(-40°C)/Z(20°C)  | 8   | 8  | 4  | 4                            | 3   | 3    | 5    | 5                          | -    | -                          |                      |                            |               |    |    |     |             |            |               |      |                |            |         |                  |      |      |      |   |   |   |   |   |               |      |      |                  |      |      |      |      |      |      |   |   |   |   |  |

◆寸法図 / DIMENSIONS (mm)



◆表示 / MARKING



◆リップル電流補正係数 /  
MULTIPLIER FOR RIPPLE CURRENT

| 係数<br>Coefficient | 周波数(Hz)<br>Frequency | 60(50) | 120  | 500  | 1k   | 10k≦ |
|-------------------|----------------------|--------|------|------|------|------|
|                   | 0.47~1µF             | 0.50   | 1.00 | 1.20 | 1.30 | 1.50 |
| 2.2~6.8µF         | 0.65                 | 1.00   | 1.20 | 1.30 | 1.50 |      |
| 10~68µF           | 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 |      |

◆呼称方法 / PART NUMBER

|                       |                 |                     |                                  |               |                     |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|---------------------|
| □□□                   | SGV             | □□□□□               | M                                | □□□           | D×L                 |
| 定格電圧<br>Rated Voltage | シリーズ名<br>Series | 静電容量<br>Capacitance | 静電容量許容差<br>Capacitance Tolerance | 副記号<br>Option | ケースサイズ<br>Case Size |

**◆標準品一覧表 / STANDARD SIZE**

 Size  $\phi D \times L$ (mm), Rated Ripple Current (mA r.m.s./105°C, 120Hz)

| Vdc   | Cap ( $\mu$ F) | Size ( $\phi$ DXL) | Ripple  | Vdc       | Cap ( $\mu$ F) | Size ( $\phi$ DXL) | Ripple  | Vdc     | Cap ( $\mu$ F) | Size ( $\phi$ DXL) | Ripple    |           |         |
|-------|----------------|--------------------|---------|-----------|----------------|--------------------|---------|---------|----------------|--------------------|-----------|-----------|---------|
| 6.3   | 22             | 4×6.1              | 26      | 35        | 4.7            | 4×6.1              | 15      | 160     | 12             | 8×10.5             | 115       |           |         |
|       | 33             | 4×6.1              | 29      |           | 10             | 5×6.1              | 28      |         | 22             | 10×10.5            | 150       |           |         |
|       | 47             | 5×6.1              | 46      |           | 22             | 6.3×6.1            | 55      |         | 39             | 12.5×13.5          | 250       |           |         |
|       | 100            | 6.3×6.1            | 71      |           | 33             | 6.3×8              | 76      |         | 47             | 12.5×16            | 310       |           |         |
|       | 220            | 6.3×8              | 121     |           |                | 8×6.5              | 84      |         | 68             | 16×16.5            | 400       |           |         |
|       | 470            | 8×10.5             | 210     |           | 100            | 8×10.5             | 180     |         | 100            | 18×16.5            | 480       |           |         |
|       | 1000           | 10×10.5            | 495     |           |                | 10×10.5            | 305     |         | 120            | 16×21.5            | 560       |           |         |
|       |                | 12.5×13.5          |         |           | 220            | 10×10.5            | 450     |         | 150            | 18×21.5            | 690       |           |         |
|       | 2200           | 12.5×16            | 750     |           |                | 330                | 12.5×16 |         | 460            | 200                | 10        | 8×10.5    | 100     |
|       | 3300           | 16×21.5            | 930     |           | 470            | 16×16.5            | 490     |         | 15             |                    | 10×10.5   | 130       |         |
|       |                | 18×16.5            |         |           | 1000           | 16×21.5            | 750     |         | 33             |                    | 12.5×13.5 | 230       |         |
| 4700  | 18×21.5        | 1200               | 1000    | 18×16.5   |                | 750                | 42      | 12.5×16 | 270            |                    |           |           |         |
| 6800  | 18×21.5        | 1350               |         | 18×16.5   | 56             |                    | 16×16.5 | 350     |                |                    |           |           |         |
| 10    | 33             | 5×6.1              | 43      | 50        | 0.47           | 4×6.1              | 4       | 250     | 68             |                    | 18×16.5   | 440       |         |
|       | 100            | 6.3×6.1            | 71      |           | 1              | 4×6.1              | 8       |         | 100            |                    | 16×21.5   | 500       |         |
|       | 330            | 8×10.5             | 195     |           | 2.2            | 4×6.1              | 11      |         | 120            |                    | 18×21.5   | 620       |         |
|       | 470            | 8×10.5             | 210     |           | 3.3            | 4×6.1              | 14      |         | 400            |                    | 6.8       | 8×10.5    | 85      |
|       |                | 10×10.5            | 440     |           | 4.7            | 5×6.1              | 19      |         |                |                    | 12        | 10×10.5   | 115     |
|       | 1000           | 12.5×16            | 500     |           | 10             | 6.3×6.1            | 35      |         |                |                    | 22        | 12.5×13.5 | 190     |
|       | 2200           | 16×16.5            | 810     |           | 22             | 6.3×8              | 67      |         |                | 33                 | 12.5×16   | 240       |         |
|       | 3300           | 16×21.5            | 1000    |           |                | 8×6.5              | 70      |         |                | 47                 | 16×16.5   | 320       |         |
|       |                | 18×16.5            |         |           | 33             | 8×10.5             | 140     |         |                | 56                 | 18×16.5   | 400       |         |
| 4700  | 18×21.5        | 1200               | 47      | 8×10.5    |                | 167                | 68      | 16×21.5 |                | 450                |           |           |         |
|       | 10×10.5        |                    |         | 180       | 100            | 8×10.5             | 230     | 100     |                | 18×21.5            | 560       |           |         |
| 16    | 10             | 4×6.1              | 28      | 63        | 100            | 10×10.5            | 315     | 450     |                | 2.7                | 8×10.5    | 55        |         |
|       | 22             | 5×6.1              | 39      |           |                | 220                | 12.5×16 |         | 380            | 4.7                | 10×10.5   | 75        |         |
|       | 47             | 6.3×6.1            | 70      |           |                | 330                | 16×16.5 |         | 470            | 10                 | 12.5×13.5 | 135       |         |
|       | 100            | 6.3×8              | 111     |           | 470            | 16×21.5            | 550     |         | 15             | 12.5×16            | 165       |           |         |
|       | 220            | 8×10.5             | 185     |           |                | 18×16.5            |         |         | 220            | 22                 | 16×16.5   | 220       |         |
|       | 330            | 8×10.5             | 290     |           |                | 1000               |         |         | 18×21.5        | 820                | 27        | 18×16.5   | 280     |
|       |                | 10×10.5            | 440     |           | 33             |                    | 16×21.5 |         | 320            |                    |           |           |         |
|       | 470            | 8×10.5             | 320     |           | 100            | 47                 | 18×21.5 |         | 400            | 450                | 6.8       | 12.5×13.5 | 110     |
|       |                | 10×10.5            | 460     |           |                | 22                 | 8×10.5  |         | 55             |                    | 10        | 12.5×16   | 150     |
|       | 1000           | 16×16.5            | 630     |           |                | 33                 | 8×10.5  |         | 115            |                    | 15        | 16×16.5   | 195     |
|       | 2200           | 16×21.5            | 930     |           |                | 47                 | 8×10.5  |         | 120            |                    | 18        | 18×16.5   | 245     |
|       |                | 18×16.5            |         |           |                | 330                | 100     |         | 12.5×16        |                    | 225       | 22        | 16×21.5 |
|       | 3300           | 18×21.5            | 1150    |           |                |                    | 220     |         | 16×16.5        |                    | 385       | 33        | 18×21.5 |
| 33    |                | 6.3×6.1            |         | 65        |                | 16×21.5            | 490     | 100     | 450            |                    | 450       | 10        | 8×10.5  |
|       | 47             | 6.3×8              | 79      |           |                | 18×16.5            |         |         |                |                    |           | 590       | 22      |
| 8×6.5 |                | 91                 |         | 33        |                | 10×10.5            | 135     |         |                |                    |           |           |         |
| 100   | 8×10.5         | 180                | 470     | 12.5×13.5 |                | 160                | 47      |         |                |                    |           | 16×16.5   | 285     |
| 220   | 8×10.5         | 320                |         | 100       |                | 16×16.5            | 285     |         |                |                    |           | 220       | 16×21.5 |
|       | 10×10.5        | 355                | 330     | 18×16.5   |                | 450                | 18×16.5 |         |                |                    |           |           | 700     |
| 330   | 10×10.5        | 450                |         | 470       |                |                    | 18×21.5 |         |                |                    |           | 590       | 2200    |
|       | 12.5×13.5      |                    | 1000    |           | 16×21.5        | 700                | 3300    |         |                | 18×21.5            |           |           | 1700    |
| 470   | 10×10.5        | 490                |         | 1000      | 18×16.5        |                    | 700     |         |                | 3300               |           | 18×21.5   | 1700    |
|       | 16×21.5        |                    | 2200    |           | 18×21.5        | 1050               |         |         |                |                    |           |           |         |
| 1000  | 18×16.5        | 700                |         | 2200      | 18×21.5        |                    | 1050    |         |                |                    |           |           |         |
|       | 2200           |                    | 18×21.5 |           | 1050           |                    |         |         |                |                    |           |           |         |
| 3300  | 18×21.5        | 1700               |         |           |                |                    |         |         |                |                    |           |           |         |