

# LGB Series Large Capacitance



| 項目 Item   | 特性 Characteristics   |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---|--|----------------|--------------------|----------------------------------|---------------|---|-----------------|---|-------------|------|------|------|------|-----|-----|-----|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 使用溫度範圍<br>Operating Temperature Range                           | - 40 ~ 85°C  | -25 ~ 85°C     |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 額定電壓範圍<br>Rated Working Voltage Range                           | 10V ~ 100V DC  | 160V ~ 450V DC |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 靜電容量容許差<br>Capacitance Tolerance<br>(120Hz, 25°C)               | ±20% (M)   |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 洩漏電流<br>Leakage Current<br>(25°C)                               | $I \leq 0.03CV + 30 (\mu A)$<br>I : Leakage Current ( $\mu A$ ) C : Rated Capacitance ( $\mu F$ ) V : Working Voltage (V)<br>After 5 minutes applying the DC working Voltage   |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 突波電壓<br>Surge Voltage (25°C)                                    | <table border="1"> <tr> <td>W.V.</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>S.V.</td> <td>13</td> <td>20</td> <td>32</td> <td>44</td> <td>63</td> <td>79</td> <td>125</td> <td>200</td> <td>250</td> <td>300</td> <td>400</td> <td>450</td> <td>500</td> </tr> </table>  |                | W.V.               | 10                               | 16            | 25  | 35              | 50                                      | 63          | 100  | 160  | 200  | 250  | 350 | 400 | 450 | S.V.          | 13   | 20   | 32   | 44   | 63   | 79   | 125  | 200  | 250  | 300  | 400  | 450  | 500  |
| W.V.  | 10   | 16             | 25                 | 35                               | 50            | 63  | 100             | 160                                     | 200         | 250  | 350  | 400  | 450  |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| S.V.  | 13   | 20             | 32                 | 44                               | 63            | 79  | 125             | 200                                     | 250         | 300  | 400  | 450  | 500  |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 散逸因素<br>(Tan. $\theta$ )<br>Dissipation Factor<br>(120Hz, 25°C) | <table border="1"> <tr> <td>W.V.</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Tan. <math>\theta</math></td> <td>0.35</td> <td>0.35</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> <td>0.25</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.20</td> <td>0.25</td> <td>0.25</td> </tr> </table> For capacitance exceeding 1000 $\mu F$ , add 0.02 per increment of 1000 $\mu F$ |                | W.V.               | 10                               | 16            | 25  | 35              | 50                                      | 63          | 100  | 160  | 200  | 250  | 350 | 400 | 450 | Tan. $\theta$ | 0.35 | 0.35 | 0.25 | 0.25 | 0.25 | 0.25 | 0.20 | 0.20 | 0.20 | 0.20 | 0.20 | 0.25 | 0.25 |
| W.V.  | 10   | 16             | 25                 | 35                               | 50            | 63  | 100             | 160                                     | 200         | 250  | 350  | 400  | 450  |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Tan. $\theta$   | 0.35   | 0.35           | 0.25               | 0.25                             | 0.25          | 0.25  | 0.20            | 0.20                                    | 0.20        | 0.20 | 0.20 | 0.25 | 0.25 |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 溫度特性<br>Temperature Characteristics                             | <table border="1"> <tr> <td>W.V.</td> <td>10 ~ 100</td> <td>160 ~ 450</td> </tr> <tr> <td>-25°C / +25°C</td> <td>4</td> <td>8</td> </tr> <tr> <td>-40°C / +25</td> <td>12</td> <td>/</td> </tr> </table> Impedance ratio at 120HZ  |                | W.V.               | 10 ~ 100                         | 160 ~ 450     | -25°C / +25°C                               | 4               | 8                                       | -40°C / +25 | 12   | /    |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| W.V.  | 10 ~ 100   | 160 ~ 450      |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| -25°C / +25°C   | 4  | 8              |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| -40°C / +25   | 12   | /              |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 高溫負荷特性<br>Load Test   | After 1000 hours application of W.V. at +85°C the capacitor shall meet he following limits <table border="1"> <tr> <td>Capacitance change</td> <td><math>\leq \pm 20\%</math> of initial value</td> </tr> <tr> <td>Tan. <math>\theta</math></td> <td><math>\leq \pm 150\%</math> of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td><math>\leq</math> initial specified value</td> </tr> </table>   |                | Capacitance change | $\leq \pm 20\%$ of initial value | Tan. $\theta$ | $\leq \pm 150\%$ of initial specified value | Leakage current | $\leq$ initial specified value          |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Capacitance change  | $\leq \pm 20\%$ of initial value   |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Tan. $\theta$   | $\leq \pm 150\%$ of initial specified value  |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Leakage current   | $\leq$ initial specified value   |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 放置特性<br>Shelf Test  | After 500 hours application of W.V. at +85°C the capacitor shall meet he following limits <table border="1"> <tr> <td>Capacitance change</td> <td><math>\leq \pm 20\%</math> of initial value</td> </tr> <tr> <td>Tan. <math>\theta</math></td> <td><math>\leq 200\%</math> of initial specified value</td> </tr> <tr> <td>Leakage current</td> <td><math>\leq 200\%</math> of initial specified value</td> </tr> </table>   |                | Capacitance change | $\leq \pm 20\%$ of initial value | Tan. $\theta$ | $\leq 200\%$ of initial specified value     | Leakage current | $\leq 200\%$ of initial specified value |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Capacitance change  | $\leq \pm 20\%$ of initial value   |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Tan. $\theta$   | $\leq 200\%$ of initial specified value  |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Leakage current   | $\leq 200\%$ of initial specified value  |                |                    |                                  |               |   |                 |   |             |      |      |      |      |     |     |     |               |      |      |      |      |      |      |      |      |      |      |      |      |      |

