

ZLG SERIES
Load Life: 105°C 1000~5000hours. Ultra Low impedance.
◆FEATURES

- Extremely reduced impedance at high frequency range than ZL series.
- Load Life : 105°C 1000~5000hours.
- RoHS compliance.


◆SPECIFICATIONS

| Items | Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|-----------------------------------|--|-----------------|-----------------|------|--------------|------------------|--------|------|-------|------|--------|------|------------------|------|--------------------|--|-----------------|------------------------------------|--|
| Category Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | |
| Rated Voltage Range | 6.3~35V.DC | | | | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20%(20°C,120Hz) | | | | | | | | | | | | | | | | | | | | | |
| Leakage Current(MAX) | I=0.03CV or 3µA whichever is greater. (After 2 minutes) I=Leakage Current(µA) C=Rated Capacitance(µF) V=Rated Voltage(V) | | | | | | | | | | | | | | | | | | | | | |
| (tanδ) Dissipation Factor(MAX) | <table border="1"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(20°C,120Hz)</td> </tr> <tr> <td>tanδ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td></td> </tr> </table> <p>When rated capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.</p> | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | (20°C,120Hz) | tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | | | | | | | | |
| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | (20°C,120Hz) | | | | | | | | | | | | | | | | |
| tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | | | | | | | | | | | | | | | | | |
| Endurance | <p>After life test with rated ripple current at conditions stated in the table below, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>Capacitance Change</td> <td>Within ±25% of the initial value.</td> <td rowspan="3"> <table border="1"> <tr> <th>Case Size</th> <th>Life Time (hrs)</th> </tr> <tr> <td>L=7</td> <td>1000</td> </tr> <tr> <td rowspan="4">L≥11</td> <td>φD≤6.3</td> <td>2000</td> </tr> <tr> <td>φD= 8</td> <td>3000</td> </tr> <tr> <td>φD= 10</td> <td>4000</td> </tr> <tr> <td>φD≥12.5</td> <td>5000</td> </tr> </table> </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. | <table border="1"> <tr> <th>Case Size</th> <th>Life Time (hrs)</th> </tr> <tr> <td>L=7</td> <td>1000</td> </tr> <tr> <td rowspan="4">L≥11</td> <td>φD≤6.3</td> <td>2000</td> </tr> <tr> <td>φD= 8</td> <td>3000</td> </tr> <tr> <td>φD= 10</td> <td>4000</td> </tr> <tr> <td>φD≥12.5</td> <td>5000</td> </tr> </table> | Case Size | Life Time (hrs) | L=7 | 1000 | L≥11 | φD≤6.3 | 2000 | φD= 8 | 3000 | φD= 10 | 4000 | φD≥12.5 | 5000 | 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. | <table border="1"> <tr> <th>Case Size</th> <th>Life Time (hrs)</th> </tr> <tr> <td>L=7</td> <td>1000</td> </tr> <tr> <td rowspan="4">L≥11</td> <td>φD≤6.3</td> <td>2000</td> </tr> <tr> <td>φD= 8</td> <td>3000</td> </tr> <tr> <td>φD= 10</td> <td>4000</td> </tr> <tr> <td>φD≥12.5</td> <td>5000</td> </tr> </table> | Case Size | | Life Time (hrs) | L=7 | 1000 | L≥11 | | φD≤6.3 | 2000 | φD= 8 | 3000 | φD= 10 | 4000 | φD≥12.5 | 5000 | | | | | |
| Case Size | Life Time (hrs) | | | | | | | | | | | | | | | | | | | | | |
| L=7 | 1000 | | | | | | | | | | | | | | | | | | | | | |
| L≥11 | φD≤6.3 | 2000 | | | | | | | | | | | | | | | | | | | | |
| | φD= 8 | 3000 | | | | | | | | | | | | | | | | | | | | |
| | φD= 10 | 4000 | | | | | | | | | | | | | | | | | | | | |
| | φD≥12.5 | 5000 | | | | | | | | | | | | | | | | | | | | |
| 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"> <tr> <td>Rated Voltage (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>(120Hz)</td> </tr> <tr> <td>Z(-25°C)/Z(20°C)</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> </tr> <tr> <td>Z(-40°C)/Z(20°C)</td> <td>12</td> <td>12</td> <td>10</td> <td>8</td> <td>6</td> <td></td> </tr> </table> | Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | (120Hz) | Z(-25°C)/Z(20°C) | 2 | 2 | 2 | 2 | 2 | | Z(-40°C)/Z(20°C) | 12 | 12 | 10 | 8 | 6 | |
| Rated Voltage (V) | 6.3 | 10 | 16 | 25 | 35 | (120Hz) | | | | | | | | | | | | | | | | |
| Z(-25°C)/Z(20°C) | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | |
| Z(-40°C)/Z(20°C) | 12 | 12 | 10 | 8 | 6 | | | | | | | | | | | | | | | | | |

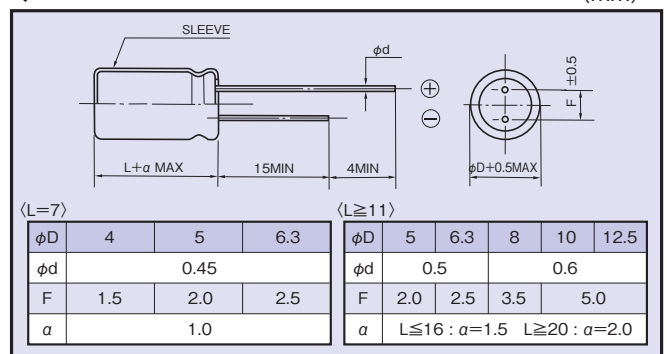
◆MULTIPLIER FOR RIPPLE CURRENT

Frequency coefficient

| Frequency (Hz) | | 120 | 1k | 10k | 100k≤ |
|----------------|-------------|------|------|------|-------|
| Coefficient | 4.7~10µF | 0.24 | 0.53 | 0.80 | 1.00 |
| | 22~33µF | 0.42 | 0.70 | 0.90 | 1.00 |
| | 47~270µF | 0.50 | 0.73 | 0.92 | 1.00 |
| | 330~680µF | 0.55 | 0.77 | 0.94 | 1.00 |
| | 820~1500µF | 0.60 | 0.80 | 0.96 | 1.00 |
| | 2200~3900µF | 0.70 | 0.85 | 0.98 | 1.00 |

◆DIMENSIONS

(mm)


◆PART NUMBER

| | | | | | | |
|---------------|--------|-------------------|-----------------------|--------|--------------|-----------|
| □□□ | ZLG | □□□□□ | □ | □□□ | □□ | D×L |
| Rated Voltage | Series | Rated Capacitance | Capacitance Tolerance | Option | Lead Forming | Case Size |

◆ STANDARD SIZE

| Rated Voltage (V·DC) | Rated capacitance (μF) | Size φD×L(mm) | Rated ripple current (mA r.m.s./105°C, 100kHz) | (Ω MAX) Impedance | |
|----------------------|------------------------|---------------|--|-------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 6.3 (0J) | 33 | 4×7 | 230 | 0.48 | 1.6 |
| | 47 | 5×7 | 350 | 0.26 | 0.86 |
| | 100 | 6.3×7 | 480 | 0.15 | 0.5 |
| | 150 | 5×11 | 405 | 0.15 | 0.5 |
| | 330 | 6.3×11 | 760 | 0.065 | 0.19 |
| | 560 | 8×11.5 | 1000 | 0.036 | 0.11 |
| | 820 | 8×16 | 1250 | 0.028 | 0.083 |
| | 1000 | 10×12.5 | 1430 | 0.027 | 0.070 |
| | 1200 | 8×20 | 1600 | 0.020 | 0.056 |
| | 1200 | 10×16 | 1820 | 0.020 | 0.056 |
| | 1500 | 10×20 | 2180 | 0.014 | 0.033 |
| | 1500 | 12.5×16 | 2200 | 0.018 | 0.033 |
| | 2200 | 10×23 | 2360 | 0.013 | 0.030 |
| | 3300 | 12.5×20 | 2480 | 0.013 | 0.030 |
| 3900 | 12.5×25 | 2900 | 0.012 | 0.024 | |
| 10 (1A) | 22 | 4×7 | 230 | 0.49 | 1.6 |
| | 33 | 5×7 | 350 | 0.26 | 0.86 |
| | 47 | 5×7 | 350 | 0.26 | 0.86 |
| | 100 | 6.3×7 | 480 | 0.15 | 0.5 |
| | 100 | 5×11 | 405 | 0.15 | 0.5 |
| | 220 | 6.3×11 | 760 | 0.065 | 0.19 |
| | 470 | 8×11.5 | 1000 | 0.036 | 0.11 |
| | 680 | 8×16 | 1250 | 0.028 | 0.083 |
| | 680 | 10×12.5 | 1430 | 0.027 | 0.070 |
| | 1000 | 8×20 | 1600 | 0.020 | 0.056 |
| | 1000 | 10×16 | 1820 | 0.020 | 0.056 |
| | 1200 | 10×20 | 2180 | 0.014 | 0.033 |
| | 1200 | 12.5×16 | 2200 | 0.018 | 0.033 |
| | 1500 | 10×23 | 2360 | 0.013 | 0.030 |
| 2200 | 12.5×20 | 2480 | 0.013 | 0.030 | |
| 3300 | 12.5×25 | 2900 | 0.012 | 0.024 | |
| 16 (1C) | 22 | 5×7 | 350 | 0.27 | 0.89 |
| | 33 | 5×7 | 350 | 0.26 | 0.86 |
| | 47 | 6.3×7 | 480 | 0.15 | 0.5 |
| | 56 | 5×11 | 405 | 0.15 | 0.5 |
| | 120 | 6.3×11 | 760 | 0.065 | 0.19 |
| | 330 | 8×11.5 | 1000 | 0.036 | 0.11 |
| | 470 | 8×16 | 1250 | 0.028 | 0.083 |
| | 470 | 10×12.5 | 1430 | 0.027 | 0.070 |
| | 680 | 8×20 | 1600 | 0.020 | 0.056 |
| | 680 | 10×16 | 1820 | 0.020 | 0.056 |
| | 1000 | 10×20 | 2180 | 0.014 | 0.033 |
| | 1000 | 12.5×16 | 2200 | 0.018 | 0.033 |
| | 1200 | 10×23 | 2360 | 0.013 | 0.030 |
| | 1500 | 12.5×20 | 2480 | 0.013 | 0.030 |
| 2200 | 12.5×25 | 2900 | 0.012 | 0.024 | |
| 25 (1E) | 10 | 4×7 | 230 | 0.52 | 1.7 |
| | 22 | 5×7 | 350 | 0.27 | 0.89 |
| | 33 | 6.3×7 | 480 | 0.16 | 0.53 |
| | 47 | 6.3×7 | 480 | 0.15 | 0.5 |
| | 47 | 5×11 | 405 | 0.15 | 0.5 |
| | 100 | 6.3×11 | 760 | 0.065 | 0.19 |
| | 220 | 8×11.5 | 1000 | 0.036 | 0.11 |
| | 330 | 8×16 | 1250 | 0.028 | 0.083 |
| | 330 | 10×12.5 | 1430 | 0.027 | 0.070 |
| | 470 | 8×20 | 1600 | 0.020 | 0.056 |
| | 470 | 10×16 | 1820 | 0.020 | 0.056 |
| | 680 | 10×20 | 2180 | 0.014 | 0.033 |
| | 680 | 12.5×16 | 2200 | 0.018 | 0.033 |
| | 820 | 10×23 | 2360 | 0.013 | 0.030 |
| 1000 | 12.5×20 | 2480 | 0.013 | 0.030 | |
| 1500 | 12.5×25 | 2900 | 0.012 | 0.024 | |
| 35 (1V) | 4.7 | 4×7 | 230 | 0.64 | 2.1 |
| | 10 | 5×7 | 350 | 0.33 | 1.1 |
| | 22 | 6.3×7 | 480 | 0.17 | 0.56 |
| | 33 | 6.3×7 | 480 | 0.16 | 0.53 |
| | 33 | 5×11 | 405 | 0.15 | 0.5 |
| | 56 | 6.3×11 | 760 | 0.065 | 0.19 |
| | 150 | 8×11.5 | 1000 | 0.036 | 0.11 |
| | 220 | 8×16 | 1250 | 0.028 | 0.083 |
| | 220 | 10×12.5 | 1430 | 0.027 | 0.070 |
| | 270 | 8×20 | 1600 | 0.020 | 0.056 |
| | 330 | 10×16 | 1820 | 0.020 | 0.056 |
| | 470 | 10×20 | 2180 | 0.014 | 0.033 |
| | 470 | 12.5×16 | 2200 | 0.018 | 0.033 |
| | 560 | 10×23 | 2360 | 0.013 | 0.030 |
| 680 | 12.5×20 | 2480 | 0.013 | 0.030 | |
| 1000 | 12.5×25 | 2900 | 0.012 | 0.024 | |