

ZLG シリーズ
SERIES

105°C 超低インピーダンス品
105°C Ultra Low Impedance

・105°C 1000~5000時間品。
Load Life : 105°C 1000~5000 hours.



◆規格表 / SPECIFICATIONS

| 項目 Items | 特性 Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------------------------|---|---------------------|----------------------|------------------------------|--|---------------|------------------|-------------------------|---|------|------------------|------|--|------------------|----|----|-----------------|---|---|-------------------|
| カテゴリ温度範囲 Category Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | |
| 定格電圧範囲 Rated Voltage Range | 6.3~35Vdc | | | | | | | | | | | | | | | | | | | | | |
| 静電容量許容差 Capacitance Tolerance | ±20% (20°C, 120Hz) | | | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current (MAX) | I=0.03CV又は3µAのいずれか大なる値以下 (定格電圧印加2分後) I=0.03CV or 3µA whichever is greater. (After 2 minutes) I=漏れ電流(µA) Leakage Current C=静電容量(µF) Capacitance V=定格電圧(Vdc) Rated Voltage | | | | | | | | | | | | | | | | | | | | | |
| 損失角の正接 (tanδ) Dissipation Factor (MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</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>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。 When capacitance is over 1000µF, tanδ shall be added 0.02 to the listed value with increase of every 1000µF.</p> | 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | (20°C, 120Hz) | tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | | | | | | | | |
| 定格電圧(Vdc) Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | (20°C, 120Hz) | | | | | | | | | | | | | | | | |
| tanδ | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | | | | | | | | | | | | | | | | | |
| 耐久性 Endurance | <p>105°C中で右表の時間定格電圧(リップル重量)印加後、下記項目を満足すること。 After applying rated voltage with rated ripple current for specified time at 105°C, the capacitors shall meet the following requirements.</p> <table border="1"> <tr> <td>静電容量変化率 Capacitance Change</td> <td>初期値の±25%以内 Within ±25% of the initial value.</td> <td>ケースサイズ Case Size</td> <td>時間(hrs) Life Time</td> </tr> <tr> <td>損失角の正接 Dissipation Factor</td> <td>規格値の200%以下 Not more than 200% of the specified value.</td> <td>L=7</td> <td>1000</td> </tr> <tr> <td>漏れ電流 Leakage Current</td> <td>規格値以下 Not more than the specified value.</td> <td rowspan="4">L≥11</td> <td>φD≤6.3 2000</td> </tr> <tr> <td></td> <td></td> <td>φD= 8 3000</td> </tr> <tr> <td></td> <td></td> <td>φD=10 4000</td> </tr> <tr> <td></td> <td></td> <td>φD≥12.5 5000</td> </tr> </table> | 静電容量変化率 Capacitance Change | 初期値の±25%以内 Within ±25% of the initial value. | ケースサイズ Case Size | 時間(hrs) Life Time | 損失角の正接 Dissipation Factor | 規格値の200%以下 Not more than 200% of the specified value. | L=7 | 1000 | 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | L≥11 | φD≤6.3 2000 | | | φD= 8 3000 | | | φD=10 4000 | | | φD≥12.5 5000 |
| 静電容量変化率 Capacitance Change | 初期値の±25%以内 Within ±25% of the initial value. | ケースサイズ Case Size | 時間(hrs) Life Time | | | | | | | | | | | | | | | | | | | |
| 損失角の正接 Dissipation Factor | 規格値の200%以下 Not more than 200% of the specified value. | L=7 | 1000 | | | | | | | | | | | | | | | | | | | |
| 漏れ電流 Leakage Current | 規格値以下 Not more than the specified value. | L≥11 | φD≤6.3 2000 | | | | | | | | | | | | | | | | | | | |
| | | | φD= 8 3000 | | | | | | | | | | | | | | | | | | | |
| | | | φD=10 4000 | | | | | | | | | | | | | | | | | | | |
| | | | φD≥12.5 5000 | | | | | | | | | | | | | | | | | | | |
| 低温特性 Low Temperature Stability (インピーダンス比) Impedance Ratio (MAX) | <table border="1"> <tr> <td>定格電圧(Vdc) Rated Voltage</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> | 定格電圧(Vdc) Rated Voltage | 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 | |
| 定格電圧(Vdc) Rated Voltage | 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 | | | | | | | | | | | | | | | | | |

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

| 周波数 (Hz) Frequency | 120 | 1k | 10k | 100k≤ | |
|--------------------|-------------|------|------|-------|------|
| 係数 Coefficient | 4.7~10µF | 0.15 | 0.53 | 0.80 | 1.00 |
| | 22~47µF | 0.18 | 0.70 | 0.90 | 1.00 |
| | 56~100µF | 0.27 | 0.73 | 0.92 | 1.00 |
| | 120~270µF | 0.49 | 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 |

◆寸法図 / DIMENSIONS (mm)



◆呼称方法 / PART NUMBER

| | | | | | | |
|-----------------------|-----------------|---------------------|----------------------------------|---------------|-------------------------|---------------------|
| □□□ | ZLG | □□□□□ | M | □□□ | □□ | DXL |
| 定格電圧 Rated Voltage | シリーズ名 Series | 静電容量 Capacitance | 静電容量許容差 Capacitance Tolerance | 副記号 Option | リード加工記号 Lead Forming | ケースサイズ Case Size |

◆副記号 / OPTION

| | |
|--------------------|---------|
| | 記号 Code |
| PETスリーブ PET Sleeve | EFC |

◆標準品一覧表 / STANDARD SIZE

| 定格電圧 Rated Voltage (Vdc) | 静電容量 Capacitance (μ F) | 外形寸法 Size ϕ D×L(mm) | 定格リプル電流 Rated ripple current (mA r.m.s./105°C, 100kHz) | インピーダンス(Ω MAX) Impedance | |
|--------------------------------|-----------------------------------|--------------------------------|--|-------------------------------------|---------------|
| | | | | 20°C, 100kHz | -10°C, 100kHz |
| 6.3 | 33 | 4×7 | 230 | 0.48 | 1.6 |
| | 47 | 5×7 | 350 | 0.26 | 0.86 |
| | 100 | 6.3×7 | 480 | 0.15 | 0.50 |
| | 150 | 5×11 | 405 | 0.15 | 0.50 |
| | 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 | 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 | 0.50 |
| | 100 | 5×11 | 405 | 0.15 | 0.50 |
| | 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 | 22 | 5×7 | 350 | 0.27 | 0.89 |
| | 33 | 5×7 | 350 | 0.26 | 0.86 |
| | 47 | 6.3×7 | 480 | 0.15 | 0.50 |
| | 56 | 5×11 | 405 | 0.15 | 0.50 |
| | 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 | 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 | 0.50 |
| | 47 | 5×11 | 405 | 0.15 | 0.50 |
| | 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 | 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 | 0.50 |
| | 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 | 10×12.5 | 1330 | 0.039 | 0.14 |
| | 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 | |