



ZL 系列 Series

特点 Features

- 低阻抗, 7(9) mm高度, 105°C 2000小时。
Low impedance, with 7(9)mm height, 105°C 2000hours.
- 符合RoHS标准。
RoHS compliant.



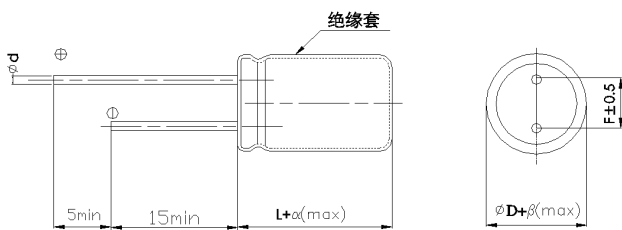
主要技术性能 Specifications

| 项目 Item | 特性 Performance Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|---|--------------------|------|------|------|------|----|----|-----------------|------|------|------|------|------|------|-----------------|----|---|---|---|---|---|
| 使用温度范围 Operating Temperature Range | -40~+105°C | | | | | | | | | | | | | | | | | | | | | |
| 额定电压范围 Rated Voltage Range | 6.3~50 V | | | | | | | | | | | | | | | | | | | | | |
| 标称容量范围 Nominal Capacitance Range | 1~560μF | | | | | | | | | | | | | | | | | | | | | |
| 标称容量允许偏差 Capacitance Tolerance | ±20% (120Hz, +20°C) | | | | | | | | | | | | | | | | | | | | | |
| 漏电流 Leakage Current | I ≤ 0.01CV or 3(μA) 2分钟(at 20°C, after 2 minutes) 取较大者 (whichever is greater) | | | | | | | | | | | | | | | | | | | | | |
| 损耗角正切值 (tgδ) Dissipation Factor (+20°C, 120Hz) | <table border="1"> <tr> <td>U_r (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> </tr> <tr> <td>tgδ</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.10</td> </tr> </table> | U _r (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | tgδ | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.10 | | | | | | | |
| U _r (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | |
| tgδ | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.10 | | | | | | | | | | | | | | | | |
| 温度特性 Temperature Characteristics (Impedance ratio at 120Hz) | <table border="1"> <tr> <td>U_r (V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</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>2</td> </tr> <tr> <td>Z-40°C / Z+20°C</td> <td>10</td> <td>8</td> <td>8</td> <td>6</td> <td>5</td> <td>3</td> </tr> </table> | U _r (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | Z-25°C / Z+20°C | 2 | 2 | 2 | 2 | 2 | 2 | Z-40°C / Z+20°C | 10 | 8 | 8 | 6 | 5 | 3 |
| U _r (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | |
| Z-25°C / Z+20°C | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | |
| Z-40°C / Z+20°C | 10 | 8 | 8 | 6 | 5 | 3 | | | | | | | | | | | | | | | | |
| 耐久性 Load Life | +105°C加额定电压2000小时, 恢复16小时后: After applying rated voltage for 2000 hours at +105°C and then resumed 16 hours: 容量变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value 漏电流 Leakage current : ≤初始规定值 ≤the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值数 ≤2times of the initial specified value | | | | | | | | | | | | | | | | | | | | | |
| 高温贮存 Shelf Life | +105°C,1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then resumed for 16 hours 容量变化率 Capacitance change : ±25%初始测量值以内 ±25% of the initial measured value 漏电流 Leakage current : ≤2倍初始规定值 ≤2times of the initial specified value 损耗角正切值 Dissipation factor : ≤2倍初始规定值数 ≤2times of the initial specified value | | | | | | | | | | | | | | | | | | | | | |

频率修正系数 Frequency Coefficient

| F(Hz) | 120 | 1K | 10K | 100K |
|---------|-----|------|------|------|
| CAP(μF) | | | | |
| ~180 | 0.4 | 0.75 | 0.90 | 1 |
| 220~560 | 0.5 | 0.85 | 0.94 | 1 |

外形图及尺寸表 Case Size Table



单位 Unit: mm

| D | 4 | 5 | 6.3 | 8 |
|--------|------------------------|-----|-----|-----|
| F | 1.5 | 2.0 | 2.5 | 3.5 |
| d | 0.45 | | 0.5 | |
| α(max) | L < 9, α=1; L=9, α=1.5 | | | |
| β(max) | 0.5 | | | |

尺寸 Dimensions

| CAP(μF) \ WV | | 6.3V(0J) | | | 10V(1A) | | | 16V(1C) | | |
|--------------|-----|----------|------|--------|---------|------|--------|---------|------|--------|
| | | Size | ESR | Ripple | Size | ESR | Ripple | Size | ESR | Ripple |
| 15 | 150 | | | | | | | 4×7 | 3.3 | 70 |
| 22 | 220 | | | | 4×7 | 3.3 | 70 | 5×7 | 1.7 | 120 |
| 33 | 330 | 5×7 | 1.7 | 120 | 5×7 | 1.7 | 120 | 6.3×7 | 0.8 | 220 |
| 47 | 470 | 5×7 | 1.7 | 120 | 5×7 | 0.8 | 165 | 6.3×7 | 0.8 | 220 |
| 68 | 680 | 6.3×7 | 0.8 | 210 | 6.3×7 | 0.8 | 210 | 6.3×7 | 0.5 | 220 |
| 100 | 101 | 6.3×7 | 0.8 | 220 | 6.3×7 | 0.5 | 220 | 6.3×7 | 0.5 | 235 |
| | | 5×7 | 0.8 | 165 | 5×7 | 0.8 | 180 | 8×7 | 0.5 | 345 |
| 150 | 151 | 6.3×7 | 0.5 | 220 | 6.3×7 | 0.5 | 220 | 6.3×7 | 0.5 | 235 |
| 220 | 221 | 8×7 | 0.5 | 345 | 6.3×7 | 0.5 | 240 | 8×7 | 0.45 | 360 |
| | | | | | 8×7 | 0.5 | 345 | 6.3×7 | 0.45 | 260 |
| 330 | 331 | 8×7 | 0.4 | 360 | 8×7 | 0.4 | 360 | 8×9 | 0.38 | 380 |
| 470 | 471 | 8×7 | 0.4 | 380 | 8×7 | 0.35 | 380 | 8×9 | 0.38 | 380 |
| 560 | 561 | 8×9 | 0.35 | 380 | 8×9 | 0.30 | 380 | | | |

| CAP(μF) \ WV | | 25V(1E) | | | 35V(1V) | | | 50V(1H) | | |
|--------------|-----|---------|------|--------|---------|------|--------|---------|------|--------|
| | | Size | ESR | Ripple | Size | ESR | Ripple | Size | ESR | Ripple |
| 1 | 010 | | | | | | | 4×7 | 3.0 | 65 |
| | | | | | | | | 6.3×7 | 2.5 | 90 |
| 2.2 | 2R2 | | | | | | | 5×7 | 1.0 | 120 |
| 4.7 | 4R7 | | | | | | | 6.3×7 | 1.2 | 160 |
| 6.8 | 6R8 | | | | 4×7 | 3.3 | 70 | | | |
| 10 | 100 | 4×7 | 3.3 | 70 | 4×7 | 1.8 | 70 | 5×7 | 1.0 | 120 |
| | | 5×7 | 2.8 | 90 | 5×7 | 1.7 | 120 | | | |
| 15 | 150 | 5×7 | 1.7 | 120 | 5×7 | 1.7 | 120 | 5×7 | 1.0 | 120 |
| 22 | 220 | 5×7 | 1.7 | 120 | 6.3×7 | 0.8 | 200 | 6.3×7 | 0.75 | 200 |
| 33 | 330 | 5×7 | 1.7 | 140 | 6.3×7 | 0.5 | 220 | 6.3×7 | 0.70 | 220 |
| 47 | 470 | 6.3×7 | 0.5 | 220 | 6.3×7 | 0.48 | 220 | 8×7 | 0.68 | 345 |
| 68 | 680 | 6.3×7 | 0.5 | 220 | 8×7 | 0.45 | 310 | 8×7 | 0.65 | 345 |
| 100 | 101 | 6.3×7 | 0.5 | 240 | 8×7 | 0.40 | 345 | | | |
| 150 | 151 | 8×7 | 0.38 | 360 | | | | | | |
| 220 | 221 | 8×9 | 0.40 | 380 | | | | | | |

Size φD×L(mm)
 Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz
 Maximum ESR (Ω) at 20°C 100KHz

单击下面可查看定价，库存，交付和生命周期等信息

[>>CHANG\(华威\)](#)