

RT 贴片式铝电解电容



- A. 工作温度范围宽 (-40°C~+105°C)
Operating over wide temperature range
- B. 适用于高密度表面组装
Available for high density surface mounting
- C. 适用于再流焊
Reflow soldering is available
- D. 性能稳定、可靠性高
High stability and reliability
- E. ROHS.REACH指令已对应完毕
Adapted to the ROHS .REACH directive

主要技能性能 Specifications

| 使用温度范围 Operating temperature range | -40°C~+105°C | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|------------------------------|---|-----------------------------|---|------------------------------|---|------|----|---------------------------------------|-----|------|------|------|------|------|------|---------------------------------------|------|---|---|---|---|---|---|
| 额定电压范围 Rated voltage range | 6.3V~100V | | | | | | | | | | | | | | | | | | | | | | | | |
| 标称容量范围 Nominal capacitance range | 0.1~1500μF | | | | | | | | | | | | | | | | | | | | | | | | |
| 标称容量允许偏差 Capacitance tolerance | ±20% (120Hz, 20°C) | | | | | | | | | | | | | | | | | | | | | | | | |
| 漏电流 (20°C) Leakage current | 1≤0.01CRVR or 3(μA),取较大者 (2分钟) CR:标称容量 (μF) UR:额定电压 (V) | | | | | | | | | | | | | | | | | | | | | | | | |
| 损耗角正切值 Dissipation factor (120Hz 20°C) | <table border="1"> <thead> <tr> <th>UR (V)</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> </tr> </thead> <tbody> <tr> <td>tgδ</td> <td>0.28</td> <td>0.22</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> </tbody> </table> | UR (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | tgδ | 0.28 | 0.22 | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.10 | | | | | | |
| UR (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | | | | | | | |
| tgδ | 0.28 | 0.22 | 0.18 | 0.16 | 0.14 | 0.12 | 0.10 | 0.10 | | | | | | | | | | | | | | | | | |
| 耐久性 Load Life | <p>+105°C施加额定电压1000小时, 恢复16小时后, 电容器应满足要求 After applying rated voltage for 1000hours at +105°C and then resumed 16 hours,the capacitor shall meet the following limits:</p> <table border="1"> <tbody> <tr> <td>电容量变化率 Capacitance change</td> <td>±20%初始值内 Within 20% of initial value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤200%初始规定值 200% or less of initial specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation factor</td> <td>≤初始规定值 Not more than the initial specified value</td> </tr> </tbody> </table> | 电容量变化率 Capacitance change | ±20%初始值内 Within 20% of initial value | 漏电流值 Leakage | ≤200%初始规定值 200% or less of initial specified value | 损耗角正切值 Dissipation factor | ≤初始规定值 Not more than the initial specified value | | | | | | | | | | | | | | | | | | |
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| 高温贮存 shelf life | <p>+105°C贮存1000小时后, 电容器应满足以上耐久性要求 After storage for 1000 hours at + 105°C,the capacitors shall meet the requirement of load life above</p> | | | | | | | | | | | | | | | | | | | | | | | | |
| 低温特性 low temperature stability 阻抗比 Impedance ratio (120Hz) | <table border="1"> <thead> <tr> <th>UR (V)</th> <th>4</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z_{25°C}/Z_{+20°C}</td> <td>7</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> </tr> <tr> <td>Z_{40°C}/Z_{+20°C}</td> <td>15</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>3</td> <td>3</td> </tr> </tbody> </table> | UR (V) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | Z _{25°C} /Z _{+20°C} | 7 | 4 | 3 | 2 | 2 | 2 | 2 | Z _{40°C} /Z _{+20°C} | 15 | 8 | 6 | 4 | 4 | 3 | 3 |
| UR (V) | 4 | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | | |
| Z _{25°C} /Z _{+20°C} | 7 | 4 | 3 | 2 | 2 | 2 | 2 | | | | | | | | | | | | | | | | | | |
| Z _{40°C} /Z _{+20°C} | 15 | 8 | 6 | 4 | 4 | 3 | 3 | | | | | | | | | | | | | | | | | | |
| 耐焊接热 Resistance to Soldering Heat | <p>在250°C的条件下, 电容器应在热板上保持30秒, 然后从热板上取出电容器, 让其在温度下恢复, 电容器应满足以下要求: The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds.After removing from the hot plate and restored room temperature , then meet the following requirement:</p> <table border="1"> <tbody> <tr> <td>电容量变化率 Capacitance change</td> <td>±10%初始值内 Within 10% of initial value</td> </tr> <tr> <td>损耗角正切 Dissipation factor</td> <td>≤初始规定值 Not more than the initial specified value</td> </tr> <tr> <td>漏电流 Leakage Current</td> <td>≤初始规定值 Not more than the initial specified value</td> </tr> </tbody> </table> | 电容量变化率 Capacitance change | ±10%初始值内 Within 10% of initial value | 损耗角正切 Dissipation factor | ≤初始规定值 Not more than the initial specified value | 漏电流 Leakage Current | ≤初始规定值 Not more than the initial specified value | | | | | | | | | | | | | | | | | | |
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外形图及尺寸表 Case Size Table



| | | | | | | | |
|---|---------|-------|---------|---------|-------|---------|---------|
| | 4*5.4 | 4*5.4 | 6.3*5.4 | 6.3*7.7 | 8*6.5 | 8*10.5 | 10*10.5 |
| A | 1.8 | 2.1 | 2.4 | 2.4 | 2.9 | 2.9 | 3.2 |
| B | 4.3 | 5.3 | 6.6 | 6.6 | 8.3 | 8.3 | 10.3 |
| C | 4.3 | 5.3 | 6.6 | 6.6 | 8.3 | 8.3 | 10.3 |
| E | 1.0 | 1.3 | 2.2 | 2.2 | 2.3 | 3.1 | 4.5 |
| L | 5.4 | 5.4 | 5.4 | 7.7 | 6.5 | 10.5 | 10.5 |
| H | 0.5~0.8 | | | | | 0.8~1.1 | |

标称电容量、额定电压、额定纹波电流与外形尺寸对应表

Nominal capacitance, rated voltage, rated ripple current and case size table

| V μF | 6.3 | | 10 | | 16 | | 25 | | 35 | | 50 | |
|---------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|-----------|------|
| | D×L MM | I~mA | D×L MM | I~mA | D×L MM | I~mA | D×L MM | I~mA | D×L MM | I~mA | D×L MM | I~mA |
| 0.1 | | | | | | | | | | | 4*5.4 | 2.3 |
| 0.22 | | | | | | | | | | | 4*5.4 | 3.4 |
| 0.33 | | | | | | | | | | | 4*5.4 | 4.1 |
| 0.47 | | | | | | | | | | | 4*5.4 | 5 |
| 1.0 | | | | | | | | | | | 4*5.4 | 10 |
| 2.2 | | | | | | | | | | | 4*5.4 | 16 |
| 3.3 | | | | | | | | | 4*5.4 | 13 | 4*5.4 | 16 |
| 4.7 | | | | | | | 4*5.4 | 22 | 4*5.4 | 22 | 5*5.4 | 23 |
| 10 | | | | | 4*5.4 | 28 | 5*5.4 | 28 | 5*5.4 | 30 | 6.3*5.4 | 32 |
| 22 | 4*5.4 | 29 | 5*5.4 | 30 | 5*5.4 | 39 | 6.3*5.4 | 55 | 6.3*5.4 | 60 | 6.3*7.7 | 51 |
| 33 | 5*5.4 | 34 | 5*5.4 | 34 | 5*5.4 | 35 | 6.3*5.4 | 65 | 8*6.5 | 84 | 6.3*7.7 | 70 |
| 47 | 5*5.4 | 46 | 6.3*5.4 | 48 | 6.3*5.4 | 70 | 6.3*5.4 | 70 | 6.3*7.7 | 80 | 6.3*7.7 | 80 |
| 100 | 6.3*7.7 | 71 | 6.3*5.4 | 69 | 6.3*5.4 | 70 | 6.3*7.7 | 100 | 8*10.5 | 296 | 8*10.5 | 230 |
| 220 | 6.3*7.7 | 120 | 6.3*7.7 | 120 | 6.3*7.7 | 120 | 8*10.5 | 320 | 10*10.5 | 435 | 10*10.5 | 375 |
| 330 | 8*10.5 | 290 | 8*10.5 | 305 | 8*10.5 | 425 | 10*10.5 | 450 | 10*10.5 | 450 | | |
| 470 | 8*10.5 | 330 | 8*10.5 | 340 | 8*10.5 | 340 | 10*10.5 | 490 | | | | |
| 1000 | 8*10.5 | 340 | 10*10.5 | 410 | 10*10.5 | 450 | | | | | | |
| 1500 | 10*10.5 | 475 | | | | | | | | | | |

额定纹波电流的频率系数

Frequency coefficient of rated ripple current

| 频率 Frequency | 50Hz | 120Hz | 300Hz | 1KHz | ≥10KHz |
|-------------------|------|-------|-------|------|--------|
| 系数 Coefficient | 0.70 | 1.00 | 1.17 | 1.36 | 1.50 |