

# 铝电解电容器

## Aluminum Electrolytic Capacitor

### UT 片式铝电解电容

#### UT Chip Type Aluminum Electrolytic Capacitors



### 产品特点 Features

- 产品直径 Case diameter  $\Phi$  4mm~ $\Phi$  10mm
- 性能稳定, 可靠性高 High stability and reliability
- 适用于再回流焊 Reflow soldering is available
- ROHS 指令已对应完毕 Adapted to the RoHS directive
- 适用于高密度表面组装 Available for high density surface mounting
- 寿命105°C 2000 小时标准品 Life time 105°C 2000hrs standard product

### 主要技术性能 Specifications

| 项目 Items  | 特性 Characteristics  |                    |      |      |      |   |      |      |      |      |
|---|---|--------------------|------|------|------|---|------|------|------|------|
| 工作温度范围<br>Category Temperature Range                                    | -55°C~+105°C  |                    |      |      |      |   |      |      |      |      |
| 额定电压范围<br>Rated Voltage Range   | 4~100V.DC   |                    |      |      |      |   |      |      |      |      |
| 标称容量范围<br>Nominal Capacitance Range                                     | 0.47 $\mu$ F ~ 1500 $\mu$ F   |                    |      |      |      |   |      |      |      |      |
| 标称容量允许偏差<br>Nominal Capacitance Tolerance                               | $\pm 20\%$ (120Hz,+20 °C)   |                    |      |      |      |   |      |      |      |      |
| 泄漏电流范围<br>Leakage Current(MAX)  | I=0.01CV( $\mu$ A) or 3 ( $\mu$ A) after 2 minutes<br>I=Leakage Current( $\mu$ A)    C=Nominal Capacitance( $\mu$ F)    V=Roted Voltage(V)  |                    |      |      |      |   |      |      |      |      |
| 损耗角正切值<br>Dissipation Factor(MAX)<br>Tan $\delta$ (20°C,120Hz)          | Rated Voltage(V)  | 4                  | 6.3  | 10   | 16   | 25  | 35   | 50   | 63   | 100  |
|   | Tan $\delta$  | 0.35               | 0.30 | 0.24 | 0.20 | 0.18                                      | 0.16 | 0.14 | 0.14 | 0.14 |
| 耐久性 Load Life   | 105°C施加额定工作电压2000H后, 放置16H, 电容器应满足以下要求。<br>After applying rated voltage with max ripple current for 2000hrs at 105°C, and then resumed 16 hours, the capacitors shall meet the following requirements   |                    |      |      |      |   |      |      |      |      |
|   | Capacitance Change  | $\pm 30\%$ 初始值以内   |      |      |      | Within $\pm 30\%$ of the initial value    |      |      |      |      |
|   | Dissipation Factor  | $\leq 200\%$ 初始值以内 |      |      |      | Not more than 200% of the specified value |      |      |      |      |
|   | Leakage Current   | $\leq$ 初始规定值       |      |      |      | Not more than the specified value         |      |      |      |      |
| 高温贮存 Shelf Life   | 105°C, 贮存1000H后, 放置16H, 电容器应满足以下要求。<br>After storage for 1000hrs at 105°C, then resumed 16 hours, the capacitors shall meet the following requirements  |                    |      |      |      |   |      |      |      |      |
|   | Capacitance Change  | $\pm 30\%$ 初始值以内   |      |      |      | Within $\pm 30\%$ of the initial value    |      |      |      |      |
|   | Dissipation Factor  | $\leq 200\%$ 初始值以内 |      |      |      | Not more than 200% of the specified value |      |      |      |      |
|   | Leakage Current   | $\leq 300\%$ 初始值以内 |      |      |      | Within 300% of initial specified value    |      |      |      |      |
| 耐焊接热<br>Resistance to Soldering Heat                                    | 在250°C的条件下, 电容器在热板上保持30秒, 然后从热板上取出电容器, 让其在室温下恢复, 电容器应满足以下要求。<br>The capacitors shall be kept on then hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement: |                    |      |      |      |   |      |      |      |      |
|   | Capacitance Change  | $\pm 10\%$ 初始值以内   |      |      |      | Within $\pm 10\%$ of the initial value    |      |      |      |      |
|   | Dissipation Factor  | $\leq$ 初始值规定值      |      |      |      | Not more than the initial specified value |      |      |      |      |
|   | Leakage Current   | $\leq$ 初始值规定值      |      |      |      | Not more than the initial specified value |      |      |      |      |
| 低温特性及阻抗比<br>Low Temperature Stability<br>Impedance Ratio (MAX)<br>120Hz | Roted Voltage (V)   | 4                  | 6.3  | 10   | 16   | 25  | 35   | 50   | 63   | 100  |
|   | Z-25°C/Z+20°C<br>(120Hz)  | < $\Phi$ 8         | 7    | 4    | 3    | 2   | 2    | 2    | 2    | 2    |
|   |   | $\geq \Phi$ 8      | 7    | 5    | 4    | 3   | 2    | 2    | 2    | 2    |
|   | Z-40°C/Z+20°C<br>(120Hz)  | < $\Phi$ 8         | 15   | 8    | 8    | 4   | 4    | 3    | 3    | 3    |
|   |   | $\geq \Phi$ 8      | 15   | 10   | 8    | 6   | 4    | 3    | 3    | 3    |
| 其它 Other  | IEC 60384 JIS-C5101   |                    |      |      |      |   |      |      |      |      |

