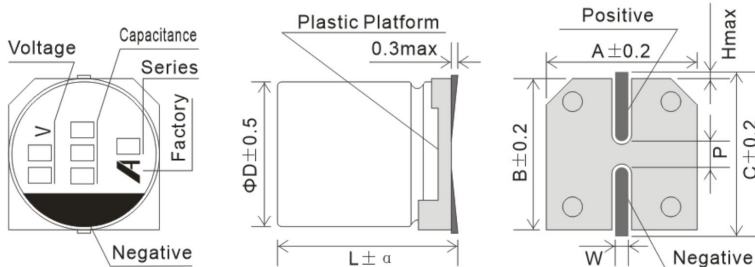


■ Description 产品描述:

Al-Ecap, 47uF, 16v, ±20%, D6.3H4.5mm, 1000Hrs@105°C, -55~+105°C, SMD.

■ Dimension & Marking 印刷及尺寸:



■ Features 特长/用途:

- 105°C, 1,000 hours assured 宽温
- Designed for surface mounting on high density PC board 适合高密度表面安装

■ Serie Expansion 系列拓展

| Items Case | A   | B   | C   | D   | P   | L   | α    | W       | H       |
|------------|-----|-----|-----|-----|-----|-----|------|---------|---------|
| φ6.3x4.5   | 6.6 | 6.6 | 7.3 | 6.3 | 2.0 | 4.5 | ±0.3 | 0.5~0.8 | 0.5max. |

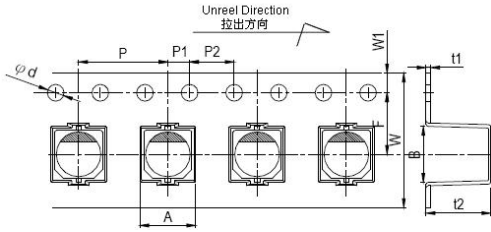


| Items 项目  | Performance 性能                            |   |      |   |        |
|---|---|---|------|---|--------|
| Rated Voltage 额定电压(V <sub>R</sub> )               | 16 V                                      |   |      |   |        |
| Capacitance 额定容量(C <sub>R</sub> )                 | 47 uF (120Hz, 20°C)                       |   |      |   |        |
| Category Temperature Range 类别温度范围                 | -55°C ~ +105°C                            |   |      |   |        |
| Capacitance Tolerance 容量误差                        | -20% ~ +20% (120Hz, 20°C)                 |   |      |   |        |
| Surge Voltage 浪涌电压(V <sub>S</sub> )               | 18.4 V <sub>DC</sub>                      |   |      |   |        |
| Leakage Current 泄漏电流(I <sub>LC</sub> )            | I <sub>LC</sub> ≤ 7.52 uA After 2 minutes |   |      |   |        |
| Dissipation Factor (Tanδ) 损失角正切值                  | ≤ 0.20 (120Hz, 20°C)                      |   |      |   |        |
| Ripple Current 纹波电流(I <sub>RC, rms</sub> )        | 44 mA (120Hz, 105°C)                      |   |      |   |        |
| Low Temperature Characteristics 温度特性(120Hz)       | Impedance ratio 阻抗比(Max.)                 | Z <sub>(-25°C)</sub> /Z <sub>(+20°C)</sub>      | 2    |   |        |
|   |   | Z <sub>(-55°C)</sub> /Z <sub>(+20°C)</sub>      | 4    |   |        |
| Endurance and Shelf Life 耐久性及高温无负荷特性              | Items 项目                                  | Endurance 耐久性                                   |      | Shelf Life Test 高温无负荷                           |        |
|   | Test Time 测试时长                            | 1,000 Hrs at 105°C; V <sub>R</sub>              |      | 1,000 Hrs at 105°C                              |        |
|   | Cap. Change 容量变化率                         | Within ±30% of initial Value ≤ 初始值的±30%         |      | Within ±30% of initial Value ≤ 初始值的±30%         |        |
|   | Tanδ 损失角正切值                               | Less than 300% of specified Value ≤ 初始规格值的±300% |      | Less than 300% of specified Value ≤ 初始规格值的±200% |        |
|   | Leakage Current 漏电流                       | Whitin specified Value ≤ 初始规格值                  |      | Whitin specified Value ≤ 初始规格值                  |        |
| Ripple Current and Frequency Multipliers 纹波电流频率系数 | Frequency (Hz)                            | 50, 60  | 120  | 1k  | 10k up |
|   | Multiplier                                | 0.70  | 1.00 | 1.30  | 1.40   |
| Standards 参考标准                                    | JIS C 5101-1, -18, IEC 60384-4            |   |      |   |        |
| Remarks 附注  | RoHS Compliance, Halogen-free             |   |      |   |        |

\* Please refer to "Precautions and Guidelines for Aluminum Electrolytic Capacitors" section in catalog for further details 详细信息请参阅目录中的“铝电解电容器注意事项和指南”

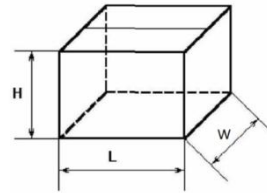
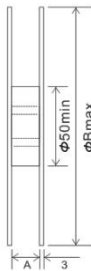
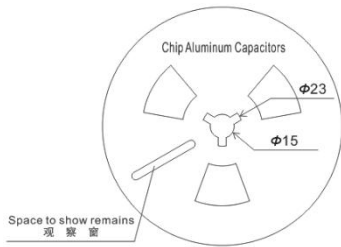
|                       |            |             |            |             |
|-----------------------|------------|-------------|------------|-------------|
| Publication Date 发行日期 | 2022-02-15 | Approved 批准 | Checked 复核 | Designed 设计 |
| Revision Date 修订日期    |            |             |            |             |
| Version No.           | 1.0        |             |            |             |

■ Taping Specifications 编带规格:



| Case 尺寸      | W (mm) | W1 (mm) | F (mm) | P (mm) | P1 (mm) | P2 (mm) | A (mm) | B (mm) | t1 (mm) | t2 (mm) |
|--------------|--------|---------|--------|--------|---------|---------|--------|--------|---------|---------|
| Tolerance 误差 | ±0.3   | ±0.15   | ±0.1   | ±0.1   | ±0.1    | ±0.1    | ±0.2   | ±0.2   | ±0.1    | ±0.2    |
| Φ6.3x4.5     | 16     | 1.75    | 7.5    | 12     | 2       | 4       | 7      | 7      | 0.4     | 4.8     |

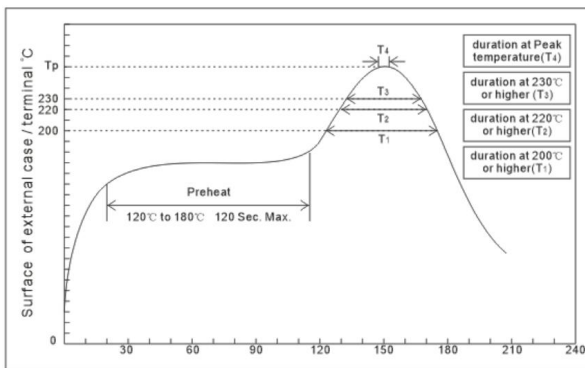
■ Park 包装:



| Case 产品尺寸 | Reel 卷装数量 | Box 盒装数量 | A±0.3(mm) | B±2(mm) | Box size 外箱尺寸(L*W*H) |
|-----------|-----------|----------|-----------|---------|----------------------|
| Φ6.3x4.5  | 1500      | 15000    | 18        | 382     | 395x395x235          |

■ Soldering Conditions 焊接条件:

- The following conditions are recommended for air convection and infrared reflow soldering on the SMD products onto a glass epoxy circuit boards by cream solder. The temperatures shown are the surface temperature values on the top of the can and on the capacitor terminals. 当使用回流焊，在玻璃环氧树脂基板上进行焊接的时候，产品顶部及端子部分温度，时间的推荐范围如下表所示。
- Reflow should be performed twice or less 推荐回流次数不超过 2 次。
- Please ensure that the capacitor became cold enough to the room temperature (5 to 35°C) before the second reflow. 请在第 1 次回流之后，必须确保电容器的温度已经完全冷却到室温 (5~35°C) 后方可进行第 2 次回流。



Note 备注:

- Average ramp-up rate is 5°C/second max  
温度上升平均每秒钟最多 5°C;
- Ramp-down rate is 6°C/second max  
温度下降平均每秒钟最多 6°C;
- Time from 25°C to peak temperature is 6 minutes max.  
从 25°C 上升到峰值温度的时间最多 6 分钟;

| Category 类别 | Time maintained above 200°C (T1)<br>200°C 以上时间 | Time maintained above 217°C (T2)<br>217°C 以上时间 (T2) | Time maintained above 230°C (T3)<br>230°C 以上时间 (T3) | Range of Peak 峰值范围 |           | Reflow number<br>回流焊次数 |
|-------------|--|---|---|--------------------|-----------|------------------------|
|             |  |   |   | Temp 温度            | Times 时间  |                        |
| Φ6.3        | 90 sec.  | 60 sec.   | 30 sec.   | 255°C Max.         | 5sec Max. | 2 times or less        |