

HPV

导电性高分子固体铝电解电容器(标准品) -贴片型
Conductive polymer solid aluminum electrolytic capacitor (standard product)- SMD type

特点 Features

- 适用于表面贴装。 Use for surface munted type.
- 适用于无铅回流焊。 The product can support lead free-reflow .
- RoHS指令已对应完毕。 Adapted to the RoHS directive.



主要技术性能 Specifications

| 项目 Items | 特性 Characteristics | | | | | |
|--|--|---|-----------------|--------------------|------------------------------|----------------|
| 工作温度范围 Operating Temperature Range | -55~+105°C | | | | | |
| 额定电压范围 Rated Voltage Range | 2.5~25V | | | | | |
| 标称容量范围 Nominal Capacitance Range | 22~2700µF | | | | | |
| 标称容量允许偏差 Nominal Capacitance Tolerance | ±20%(20°C, 120Hz) | | | | | |
| 漏电流 Leakage Current | 参照规格表 Reference parameter table 2分钟 at 20°C, after 2 minutes | | | | | |
| 损耗角正切(tgδ) Dissipation Factor (Max) | 20°C, 120Hz | 直径 tgδ | Φ5 0.10 | Φ6.3(L≤7) 0.10 | Φ6.3(L>7) 0.08 | Φ8~Φ10 0.08 |
| 等效串联电阻 ESR | 参照规格表 Reference parameter table (mΩ at 100k~300kHz 20°C max) | | | | | |
| 高低温特性比 Characteristics of impedance ratio at high temp. and low temp. | 要求在100KHZ 20°C Based the value at 100KHZ. +20°C | | -55°C +105°C | Z/Z20°C Z/Z20°C | 0.75 to 1.25 0.75 to 1.25 | |
| 耐久性 Load Life | +105°C施加额定电压2000小时后, 待温度恢复到20°C后进行测试, 电容器应满足以下要求: After 2000 hours' application of rated voltage at 105°C, and then being stabilized at +20°C, the capacitors shall meet the following requirement: | | | | | |
| | 容量变化率 Capacitance Change | ±20%初始值以内 Within ±20% of the initial value (16V: within ±25% of the initial value) | | | | |
| | 损耗角正切 Dissipation Factor | ≤150%初始规定值 Not more than 150% of the initial specified value | | | | |
| | 阻抗 Equivalent Series Resistance | ≤150%初始规定值 Not more than 150% of the initial specified value | | | | |
| | 漏电流 Leakage Current | ≤初始规定值 Not more than the initial specified value | | | | |
| 稳态湿热 Damp heat(Steady state) | 60°C, 90~95% RH, 不加电压1000小时 60°C, 90~95% RH, 1000 hours, No-applied voltage. | | | | | |
| | 容量变化率 Capacitance Change | ±20%初始值以内 Within ±20% of the initial value (16V: within ±25% of the initial value) | | | | |
| | 损耗角正切 Dissipation Factor | ≤150%初始规定值 Not more than 150% of the initial specified value | | | | |
| | 阻抗 Equivalent Series Resistance | ≤150%初始规定值 Not more than 150% of the initial specified value | | | | |
| | 漏电流 Leakage Current | ≤初始规定值 Not more than the initial specified value | | | | |
| 耐焊接热 Resistance to Soldering Heat | (VPS)(260°C X 10s) | | | | | |
| | 容量变化率 Capacitance Change | ±10%初始值以内 Within ±10% of the initial value (16V以上: within ±15% of the initial value) | | | | |
| | 损耗角正切 Dissipation Factor | ≤初始规定值 Not more than the initial specified value | | | | |
| | 阻抗 Equivalent Series Resistance | ≤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 | | | | |

※ 当产生疑问的时候, 用以下电压处理后测定。

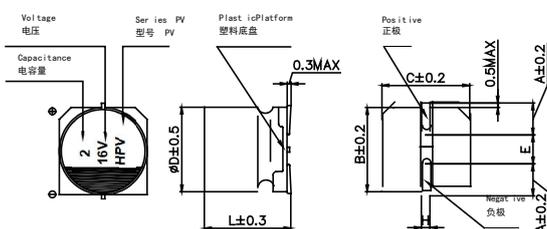
电压处理: 125°C下, 连续加载120 分钟电压。加载电压为额定电压。

When in doubt, apply the following voltage treatment and measure.

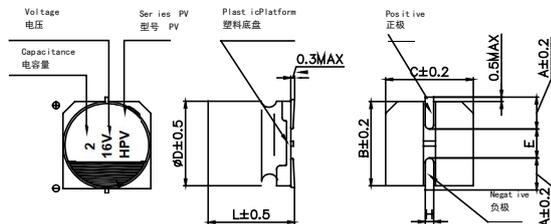
Voltage processing: under the condition of 125 °C ambient temperature, continuous load voltage of 120 minutes. Load voltage is rated voltage.

尺寸图 Dimensions

Φ5 ~ Φ6.3



Φ8 ~ Φ10



尺寸表 Size List

单位 Unit: mm

| | 5×5.8 | 6.3×5.8 | 6.3×7.7 | 8×10.5 | 8×12.5 | 10×10.5 | 10×12.5 |
|---|---------|---------|---------|---------|--------|---------|---------|
| A | 2.1 | 2.4 | 2.4 | 2.9 | 2.9 | 3.2 | 3.2 |
| B | 5.3 | 6.6 | 6.6 | 8.3 | 8.3 | 10.3 | 10.3 |
| C | 5.3 | 6.6 | 6.6 | 8.3 | 8.3 | 10.3 | 10.3 |
| E | 1.3 | 2.2 | 2.2 | 3.1 | 3.1 | 4.5 | 4.5 |
| L | 5.8 | 5.8 | 7.7 | 10.5 | 12.5 | 10.5 | 12.5 |
| H | 0.5~0.8 | | | 0.8~1.1 | | | |

标称电容量、额定电压、额定纹波电流与尺寸对应表
 Nominal Capacitance, Rated Voltage, Rated Ripple Current and Case Size Table

| Rated Volt. (V) | Capacitance (uF) | Size ΦD×L(mm) | Tanδ (120HZ,20°C) | LC (uA) | ESR (mΩ/at 100k~300kHz 20°C max) | Rated R. C. (mA/rms at 100kHz, 105°C) |
|-----------------|------------------|---------------|-------------------|---------|----------------------------------|---------------------------------------|
| 2.5 | 180 | 5×5.8 | 0.1 | 300 | 30 | 2100 |
| | 220 | 6.3×5.8 | 0.1 | 300 | 25 | 2500 |
| | 270 | 6.3×5.8 | 0.1 | 300 | 25 | 2500 |
| | 330 | 6.3×5.8 | 0.1 | 300 | 25 | 2700 |
| | 390 | 6.3×5.8 | 0.1 | 300 | 25 | 2700 |
| | 470 | 6.3×7.7 | 0.1 | 300 | 20 | 3700 |
| | 560 | 6.3×7.7 | 0.1 | 300 | 20 | 3700 |
| | 680 | 8×10.5 | 0.08 | 340 | 15 | 4100 |
| | 820 | 8×10.5 | 0.08 | 410 | 15 | 4100 |
| | 1000 | 8×10.5 | 0.08 | 500 | 15 | 4100 |
| | 1200 | 8×12.5 | 0.08 | 600 | 12 | 4300 |
| | 1500 | 8×12.5 | 0.08 | 750 | 12 | 4300 |
| | 2200 | 10×10.5 | 0.08 | 1100 | 12 | 4700 |
| | 2700 | 10×12.5 | 0.08 | 1350 | 12 | 4700 |
| 4 | 100 | 5×5.8 | 0.1 | 300 | 30 | 1800 |
| | 150 | 5×5.8 | 0.1 | 300 | 30 | 1800 |
| | 220 | 6.3×5.8 | 0.1 | 300 | 25 | 2500 |
| | 270 | 6.3×5.8 | 0.1 | 300 | 25 | 2500 |
| | 330 | 6.3×5.8 | 0.1 | 300 | 25 | 2600 |
| | 390 | 6.3×5.8 | 0.1 | 312 | 25 | 2600 |
| | 470 | 6.3×7.7 | 0.1 | 376 | 20 | 3100 |
| | 560 | 6.3×7.7 | 0.1 | 448 | 20 | 3100 |
| | 680 | 8×10.5 | 0.08 | 544 | 15 | 4100 |
| | 820 | 8×10.5 | 0.08 | 656 | 15 | 4100 |
| | 1000 | 8×10.5 | 0.08 | 800 | 15 | 4100 |
| | 1200 | 8×12.5 | 0.08 | 960 | 12 | 4700 |
| | 1500 | 8×12.5 | 0.08 | 1200 | 12 | 4700 |
| | 2200 | 10×10.5 | 0.08 | 1760 | 12 | 5400 |
| 2700 | 10×12.5 | 0.08 | 2160 | 12 | 5400 | |
| 6.3 | 100 | 5×5.8 | 0.1 | 300 | 30 | 1500 |
| | 100 | 6.3×5.8 | 0.1 | 300 | 25 | 2400 |
| | 120 | 5×5.8 | 0.1 | 300 | 30 | 1500 |
| | 120 | 6.3×7.7 | 0.1 | 300 | 20 | 2600 |
| | 150 | 6.3×5.8 | 0.1 | 300 | 25 | 2400 |
| | 220 | 6.3×5.8 | 0.1 | 300 | 25 | 2400 |
| | 220 | 6.3×7.7 | 0.1 | 300 | 20 | 2600 |
| | 330 | 6.3×7.7 | 0.1 | 415 | 20 | 2600 |
| | 470 | 6.3×7.7 | 0.1 | 592 | 20 | 2600 |
| | 680 | 8×10.5 | 0.08 | 856 | 15 | 4100 |
| | 820 | 8×10.5 | 0.08 | 1033 | 15 | 4100 |
| | 1000 | 8×10.5 | 0.08 | 1260 | 15 | 4100 |
| | 1200 | 8×12.5 | 0.08 | 1512 | 12 | 4700 |

| Rated Volt. (V) | Capacitance (uF) | Size ΦD×L(mm) | Tanδ (120HZ,20°C) | LC (μA) | ESR (mΩ/at 100k~300kHz 20°C max) | Rated R. C. (mA/rms at 100kHz, 105°C) |
|-----------------|------------------|---------------|-------------------|---------|----------------------------------|---------------------------------------|
| 6.3 | 1500 | 8×12.5 | 0.08 | 1890 | 12 | 4700 |
| | 2200 | 10×10.5 | 0.08 | 2772 | 12 | 5400 |
| | 2700 | 10×12.5 | 0.08 | 3400 | 12 | 5400 |
| 10 | 47 | 5×5.8 | 0.1 | 300 | 40 | 1300 |
| | 56 | 5×5.8 | 0.1 | 300 | 40 | 1300 |
| | 56 | 6.3×5.8 | 0.1 | 300 | 30 | 2100 |
| | 68 | 6.3×5.8 | 0.1 | 300 | 30 | 2100 |
| | 120 | 6.3×5.8 | 0.1 | 300 | 30 | 2100 |
| | 150 | 6.3×7.7 | 0.1 | 300 | 25 | 2500 |
| | 220 | 6.3×7.7 | 0.1 | 440 | 25 | 2500 |
| | 270 | 6.3×7.7 | 0.1 | 540 | 25 | 2500 |
| | 470 | 8×10.5 | 0.08 | 940 | 20 | 3700 |
| | 560 | 8×10.5 | 0.08 | 1120 | 20 | 3700 |
| | 680 | 8×10.5 | 0.08 | 1360 | 20 | 3700 |
| | 820 | 8×12.5 | 0.08 | 1640 | 15 | 4300 |
| | 1000 | 8×12.5 | 0.08 | 2000 | 15 | 4300 |
| | 1200 | 10×10.5 | 0.08 | 2400 | 15 | 5200 |
| | 1500 | 10×12.5 | 0.08 | 3000 | 15 | 5200 |
| 16 | 22 | 5×5.8 | 0.1 | 300 | 45 | 1200 |
| | 33 | 5×5.8 | 0.1 | 300 | 45 | 1200 |
| | 39 | 5×5.8 | 0.1 | 300 | 45 | 1200 |
| | 39 | 6.3×5.8 | 0.1 | 300 | 40 | 1600 |
| | 47 | 6.3×5.8 | 0.1 | 300 | 40 | 1600 |
| | 68 | 6.3×5.8 | 0.1 | 300 | 40 | 1600 |
| | 82 | 6.3×5.8 | 0.1 | 300 | 40 | 1600 |
| | 100 | 6.3×5.8 | 0.1 | 320 | 40 | 1600 |
| | 100 | 6.3×7.7 | 0.1 | 320 | 35 | 2300 |
| | 150 | 6.3×7.7 | 0.1 | 480 | 35 | 2300 |
| | 330 | 8×10.5 | 0.08 | 1056 | 30 | 3700 |
| | 470 | 8×10.5 | 0.08 | 1504 | 30 | 3700 |
| | 560 | 8×10.5 | 0.08 | 1792 | 30 | 3700 |
| | 680 | 8×12.5 | 0.08 | 2176 | 25 | 4100 |
| | 820 | 10×10.5 | 0.08 | 2624 | 25 | 5100 |
| 1000 | 10×12.5 | 0.08 | 3200 | 20 | 5100 | |
| 20 | 22 | 6.3×5.8 | 0.1 | 300 | 50 | 1600 |
| | 47 | 6.3×5.8 | 0.1 | 300 | 50 | 1600 |
| | 56 | 6.3×5.8 | 0.1 | 300 | 50 | 1600 |
| | 100 | 6.3×7.7 | 0.1 | 400 | 45 | 1800 |
| | 120 | 6.3×7.7 | 0.1 | 480 | 45 | 1800 |
| | 220 | 8×10.5 | 0.08 | 880 | 30 | 3100 |
| | 270 | 8×10.5 | 0.08 | 1080 | 30 | 3100 |
| | 330 | 8×10.5 | 0.08 | 1320 | 30 | 3100 |
| | 390 | 8×10.5 | 0.08 | 1560 | 30 | 3100 |
| | 470 | 8×12.5 | 0.08 | 1880 | 25 | 3700 |
| | 680 | 10×10.5 | 0.08 | 2720 | 25 | 4300 |
| | 820 | 10×12.5 | 0.08 | 3280 | 25 | 4300 |
| 25 | 47 | 6.3×5.8 | 0.1 | 300 | 60 | 1200 |
| | 56 | 6.3×5.8 | 0.1 | 300 | 60 | 1200 |
| | 56 | 6.3×7.7 | 0.1 | 300 | 50 | 1500 |
| | 82 | 6.3×7.7 | 0.1 | 410 | 50 | 1500 |
| | 150 | 8×10.5 | 0.08 | 750 | 35 | 2900 |
| | 220 | 8×10.5 | 0.08 | 1100 | 35 | 2900 |
| | 270 | 8×12.5 | 0.08 | 1350 | 30 | 3100 |
| | 330 | 10×10.5 | 0.08 | 1650 | 30 | 3800 |
| | 470 | 10×12.5 | 0.08 | 2350 | 30 | 3800 |