



# PV

## 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<br>Operating Temperature Range                                    | -55~+105°C   |   |            |                   |                    |                |
| 额定电压范围<br>Rated Voltage Range  | 2.5~25V  |   |            |                   |                    |                |
| 标称电容量范围<br>Nominal Capacitance Range                                     | 22~2700µF  |   |            |                   |                    |                |
| 标称电容量允许偏差<br>Nominal Capacitance Tolerance                               | ±20% (20°C, 120Hz)   |   |            |                   |                    |                |
| 漏电流<br>Leakage Current   | 参照规格表 Reference parameter table<br>2分钟 at 20°C, after 2 minutes  |   |            |                   |                    |                |
| 损耗角正切 (tgδ)<br>Dissipation Factor (Max)                                  | 20°C, 120Hz  | 直径<br>tgδ   | Φ5<br>0.10 | Φ6.3(L≤7)<br>0.10 | Φ6.3 (L>7)<br>0.08 | Φ8~Φ10<br>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<br>Characteristics of impedance ratio at high temp. and low temp. | 要求在100KHZ 20°C<br>Based the value at 100KHZ. +20°C   | -55°C   | Z/Z20°C    | 0.75 to 1.25      |                    |                |
| 耐久性<br>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:<br>After 2000 hours' application of rated voltage at 105°C, and then being stabilized at +20°C, the capacitors shall meet the following requirement: |   |            |                   |                    |                |
|  | 电容量变化率<br>Capacitance Change   | ±20%初始值以内<br>Within ±20% of the initial value (16V: within ±25% of the initial value)   |            |                   |                    |                |
|  | 损耗角正切<br>Dissipation Factor  | ≤150%初始规定值<br>Not more than 150% of the initial specified value                         |            |                   |                    |                |
|  | 阻抗<br>Equivalent Series Resistance   | ≤150%初始规定值<br>Not more than 150% of the initial specified value                         |            |                   |                    |                |
|  | 漏电流<br>Leakage Current   | ≤初始规定值<br>Not more than the initial specified value                                     |            |                   |                    |                |
| 稳态湿热<br>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.   |   |            |                   |                    |                |
|  | 电容量变化率<br>Capacitance Change   | ±20%初始值以内<br>Within ±20% of the initial value (16V: within ±25% of the initial value)   |            |                   |                    |                |
|  | 损耗角正切<br>Dissipation Factor  | ≤150%初始规定值<br>Not more than 150% of the initial specified value                         |            |                   |                    |                |
|  | 阻抗<br>Equivalent Series Resistance   | ≤150%初始规定值<br>Not more than 150% of the initial specified value                         |            |                   |                    |                |
|  | 漏电流<br>Leakage Current   | ≤初始规定值<br>Not more than the initial specified value                                     |            |                   |                    |                |
| 耐焊接热<br>Resistance to Soldering Heat                                     | (VPS) (260°C X 10s)  |   |            |                   |                    |                |
|  | 电容量变化率<br>Capacitance Change   | ±10%初始值以内<br>Within ±10% of the initial value (16V以上: within ±15% of the initial value) |            |                   |                    |                |
|  | 损耗角正切<br>Dissipation Factor  | ≤初始规定值<br>Not more than the initial specified value                                     |            |                   |                    |                |
|  | 阻抗<br>Equivalent Series Resistance   | ≤初始规定值<br>Not more than the initial specified value                                     |            |                   |                    |                |
|  | 漏电流<br>Leakage Current   | ≤初始规定值<br>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。

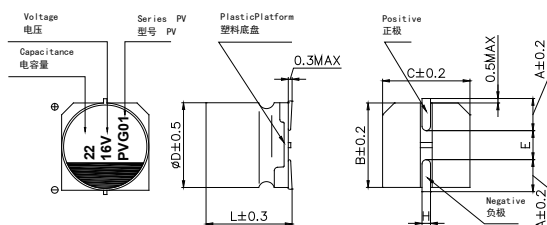
电压处理: 125°C下, 连续加载120 分钟的电压。加载电压为额定电压。

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

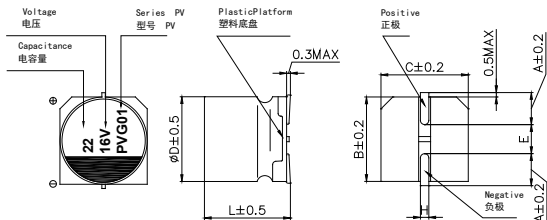
Voltage processing: under the condition of 125 °C ambient temperature, continuous load voltage of 120 minutes. Load voltage is rated voltage.

### 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 (μA) | 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                                  |