

VPQ Series 片式固态长寿命铝电解电容器

Long Life Conductive Polymer Aluminum Solid Electrolytic Capacitor Of SMD Type

- 体积小, 容量大, 105°C 10000 hours
- 性能稳定, 可靠性高, 高纹波电流
- Small size, Large capacity, 105°C 10000 hours
- High stability and reliability with high ripple current

NEW

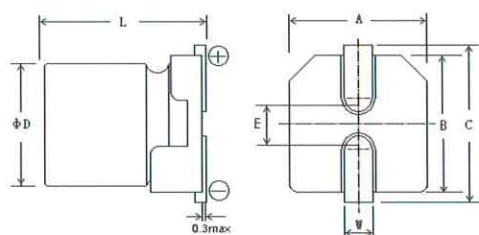


■ 主要技术性能 Specifications

| 项目 Items | 主要特性 Performance Characteristics | | | | | | | | |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|------------------------------------------------|-----------------|---------------------------------------|------------------------------|-----------------------------------------------------|----------------------------------------|-----------------------------------------------------|
| 使用温度范围 Operating Temperature Range | -55~+105°C | | | | | | | | |
| 额定电压范围 Rated Voltage Range | 4-25V. DC | | | | | | | | |
| 标称容量允许偏差 Capacitance Tolerance | ±20% (120Hz, 20°C) | | | | | | | | |
| 漏电流(20°C) Leakage Current | 施加额定工作电压 2 分钟, I≤0.2 CV(μA) After 2 minutes' application of rated voltage, the leakage current is not more than 0.2 CV | | | | | | | | |
| 损耗角正切值(120Hz 20°C) Dissipation Factor | 测试频率 120Hz/温度 20°C, 损耗小于规范值 Less than the specified value at 120Hz, 20°C | | | | | | | | |
| 等效串联电阻 Equivalent Series Resistance | 测试频率 100KHz/温度 20°C, 等效串联电阻小于规范值 Less than the specified value at 100KHz, 20°C | | | | | | | | |
| 耐久性 Load Life(105°C, 10000hrs) | <p>在 105°C 环境施加额定工作电压 10000 小时后, 电容器的特性符合下表要求。 105 °C environment d rated operating voltage 10,000 hours, capacitor characteristics meet the requirements in the following table.</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>初始值的±25%以内 Within ±25% of the initial value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤规范值 Less than the specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤规范值的 200% Less than 200% of the specified value</td> </tr> <tr> <td>等效串联电阻 Equivalent Series Resistance</td> <td>≤规范值的 200% Less than 200% of the specified value</td> </tr> </table> | 电容量变化率 Capacitance Change | 初始值的±25%以内 Within ±25% of the initial value | 漏电流值 Leakage | ≤规范值 Less than the specified value | 损耗角正切值 Dissipation Factor | ≤规范值的 200% Less than 200% of the specified value | 等效串联电阻 Equivalent Series Resistance | ≤规范值的 200% Less than 200% of the specified value |
| 电容量变化率 Capacitance Change | 初始值的±25%以内 Within ±25% of the initial value | | | | | | | | |
| 漏电流值 Leakage | ≤规范值 Less than the specified value | | | | | | | | |
| 损耗角正切值 Dissipation Factor | ≤规范值的 200% Less than 200% of the specified value | | | | | | | | |
| 等效串联电阻 Equivalent Series Resistance | ≤规范值的 200% Less than 200% of the specified value | | | | | | | | |
| 高温贮存 Shelf Life (105°C, 1000hrs) | <p>在 105°C 环境放置 1000 小时后, 电容器的特性符合下表要求。 After storage 1000 hours' at +105°C and then resumed 16 hours, the characteristics requirements listed .</p> <table border="1"> <tr> <td>电容量变化率 Capacitance Change</td> <td>初始值的±20%以内 Within ±20% of the initial value</td> </tr> <tr> <td>漏电流值 Leakage</td> <td>≤规范值 Less than the specified value</td> </tr> <tr> <td>损耗角正切值 Dissipation Factor</td> <td>≤规范值的 150% Less than 150% of the specified value</td> </tr> <tr> <td>等效串联电阻 Equivalent Series Resistance</td> <td>≤规范值的 150% Less than 150% of the specified value</td> </tr> </table> | 电容量变化率 Capacitance Change | 初始值的±20%以内 Within ±20% of the initial value | 漏电流值 Leakage | ≤规范值 Less than the specified value | 损耗角正切值 Dissipation Factor | ≤规范值的 150% Less than 150% of the specified value | 等效串联电阻 Equivalent Series Resistance | ≤规范值的 150% Less than 150% of the specified value |
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| 损耗角正切值 Dissipation Factor | ≤规范值的 150% Less than 150% of the specified value | | | | | | | | |
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VPQ Series

外形图及尺寸 Case size table



mm

| φD×L | Φ5×6.0 | Φ6.3×6.0 | Φ6.3×8.0 | Φ8×9.0 |
|-------|---------|----------|----------|---------|
| A±0.2 | 5.3 | 6.6 | 6.6 | 8.3 |
| B±0.2 | 5.3 | 6.6 | 6.6 | 8.3 |
| C±0.3 | 6.1 | 7.4 | 7.4 | 9.1 |
| E | 1.3 | 2.2 | 2.2 | 3.1 |
| L±0.5 | 6.0 | 6.0 | 8.0 | 9.0 |
| W | 0.5~0.9 | | | 0.8~1.1 |

编码和规格 Part number & Specifications

| 额定电压 Rated Voltage (V) | 标称容量 Capacitance (μF) | 产品编码 Part Number | 等效串联电阻 ESR(mΩ max) 100KHz to 300KHz | 耐纹波电流 (mA rms/ 105°C, 100KHz) | 损耗 Tan δ (120Hz) | 漏电流 (max) (μA) | 尺寸 ΦD×L (mm) |
|------------------------------|-----------------------------|---------------------|-------------------------------------------|-------------------------------------|------------------------|----------------------|--------------------|
| 4 | 150 | VPQ0G151M0506 | 25 | 2150 | 0.12 | 120 | 5×6.0 |
| | 560 | VPQ0G561M0809 | 22 | 3220 | 0.12 | 448 | 8×9.0 |
| 6.3 | 47 | VPQ0J470M0506 | 30 | 1970 | 0.12 | 59 | 5×6.0 |
| | 100 | VPQ0J101M0606 | 25 | 2150 | 0.12 | 126 | 6.3×6.0 |
| | 120 | VPQ0J121M0606 | 22 | 2570 | 0.12 | 151 | 6.3×6.0 |
| | 220 | VPQ0J221M0608 | 22 | 2570 | 0.12 | 277 | 6.3×8.0 |
| | 390 | VPQ0J391M0809 | 22 | 3220 | 0.12 | 491 | 8×9.0 |
| 10 | 33 | VPQ1A330M0506 | 70 | 1100 | 0.12 | 66 | 5×6.0 |
| | 68 | VPQ1A680M0606 | 30 | 1970 | 0.12 | 136 | 6.3×6.0 |
| | 120 | VPQ1A121M0608 | 27 | 2320 | 0.12 | 240 | 6.3×8.0 |
| | 150 | VPQ1A151M0809 | 30 | 2760 | 0.12 | 300 | 8×9.0 |
| 16 | 22 | VPQ1C220M0506 | 90 | 1060 | 0.12 | 70 | 5×6.0 |
| | 39 | VPQ1C390M0606 | 35 | 1820 | 0.12 | 125 | 6.3×6.0 |
| | 68 | VPQ1C680M0608 | 30 | 2200 | 0.12 | 218 | 6.3×8.0 |
| | 82 | VPQ1C820M0809 | 30 | 2760 | 0.12 | 262 | 8×9.0 |
| | 120 | VPQ1C121M0809 | 27 | 2900 | 0.12 | 384 | 8×9.0 |
| 25 | 22 | VPQ1E220M0606 | 110 | 1060 | 0.12 | 110 | 6.3×6.0 |
| | 33 | VPQ1E330M0606 | 110 | 1060 | 0.12 | 165 | 6.3×6.0 |
| | 47 | VPQ1E470M0608 | 100 | 1220 | 0.12 | 235 | 6.3×8.0 |
| | 100 | VPQ1E101M0809 | 100 | 1220 | 0.12 | 500 | 8×9.0 |

纹波电流频率补偿系数 Frequency coefficient of allowable ripple current

| Frequency 频率 | 120Hz≤f<1KHz | 1KHz≤f<10KHz | 10KHz≤f<100KHz | 100kHz≤f<500KHz |
|----------------|--------------|--------------|----------------|-----------------|
| Coefficient 系数 | 0.05 | 0.30 | 0.70 | 1.00 |