# VJ 型片式铝电解电容

# VJ Series Chip Type Aluminum Electrolytic Capacitors

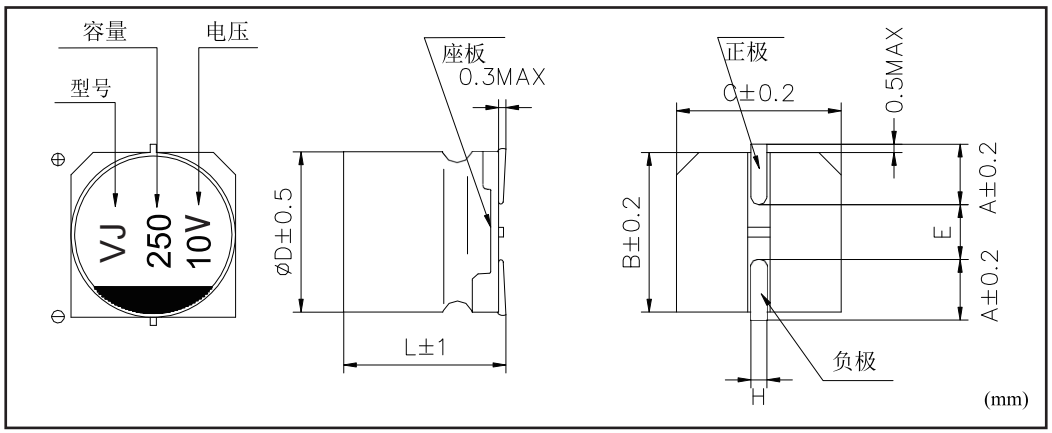
## 特点 Features

- 中高压宽温长寿命品。High voltage and long life and wide working temperature.
- 适用于回流焊。Reflow soldering is available.
- 适用于高密度表面贴装。Suitable for high density SMT.
- 符合ROHS 指令标准。Comply with ROHS directive standards。

## 主要技术性能 Specifications

| 项目<br>Items | 特性 Characteristics | | |
|---|---|---|---|
| 工作温度范围<br>Operating Temperature Range | -40℃ ~ +105℃ | | |
| 额定电压范围<br>Rated Voltage Range | 160V ~ 400V | | |
| 标称电容量范围<br>Nominal Capacitance Range | 1 ~ 22μF | | |
| 标称电容量允许偏差<br>Nominal Capacitance Tolerance | ±20%（20℃，120Hz） | | |
| 漏电流<br>Leakage Current | 160V ~ 400V | | |
| | I = 0.04 CRVR +100（μA) max.(1 min) | | |
| 损耗角正切（tgδ）<br>Dissipation Factor (Max)<br>20℃, 120Hz | UR (V) | 160 ~ 250 | 350 ~ 400 |
| | tgδ | 0.15 | 0.20 |
| 耐久性<br>Load Life | +105℃施加额定电压 1000 小时后，电容器应满足以下要求：<br>After 1000 hours' application of rated voltage at 105℃, the capacitor 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 | |
| | 损耗角正切<br>Dissipation Factor | ≤ 200%初始规定值<br>Not more than 200% of the initial specified value | |
| | 漏电流<br>Leakage Current | ≤ 初始规定值<br>Not more than the initial specified value | |
| 高温贮存<br>Shelf Life | +105℃贮存 1000 小时后，电容器应满足以上耐久性要求<br>After storage for 1000 hours at +105℃, the capacitors shall meet the requirement of load life above | | |
| 低温特性<br>Low Temperature Stability<br>阻抗比<br>Impedance Ratio (120Hz) | UR (V) | 160 ~ 250 | 350 ~ 400 |
| | Z(-25℃)/Z(+20℃) | 3 | 6 |
| | Z(-40℃)/Z(+20℃) | 6 | 10 |
| 耐焊接热<br>Resistance to Soldering Heat | 在 250℃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 the hot plate maintained at 250℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement. | | |
| | 电容量变化率<br>Capacitance Change | ±10%初始值以内<br>Within ±10% 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 | |
| | 漏电流<br>Leakage Current | ≤ 初始规定值<br>Not more than the initial specified value | |

## 外形图及尺寸表 Case Size Table




| | Φ8X10.5 | Φ8X12.5 | Φ10X10.5 | Φ10X12.5 |
|---|---|---|---|---|
| A | 2.9 | 2.9 | 3.2 | 3.2 |
| B | 8.3 | 8.3 | 10.3 | 10.3 |
| C | 8.3 | 8.3 | 10.3 | 10.3 |
| E | 3.1 | 3.1 | 4.5 | 4.5 |
| L | 10.5 | 12.5 | 10.5 | 12.5 |
| H | 0.8 ~ 1.1 | | | |

■ 标称电容量、额定电压、额定纹波电流与外形尺寸对应表

Nominal capacitance, rated

| | 电压 WV（Vdc）160 | | 电压 WV（Vdc）200 | | 电压 WV（Vdc）250 | | 电压 WV（Vdc）350 | | 电压 WV（Vdc）400 | |
|---|---|---|---|---|---|---|---|---|---|---|
| 容量 Ca（μA） | 产品尺寸 | 纹波电流 | 产品尺寸 | 纹波电流 | 产品尺寸 | 纹波电流 | 产品尺寸 | 纹波电流 | 产品尺寸 | 纹波电流 |
| 1 | | | | | | | | | 8*10.5 | 42 |
| 2.2 | | | | | | | 8*10.5 | 44 | 8*12.5 | 40 |
| 3.3 | | | 8*10.5 | 55 | 8*10.5 | 34 | 8*12.5 | 43 | 10*10.5 | 58 |
| 4.7 | 8*10.5 | 68 | 8*10.5 | 53 | 8*10.5 | 34 | 10*10.5 | 60 | 10*10.5 | 56 |
| 5.6 | 8*10.5 | 67 | 8*10.5 | 51 | 8*10.5 | 36 | 10*10.5 | 58 | 10*12.5 | 72 |
| 6.8 | 8*10.5 | 65 | 8*10.5 | 49 | 8*12.5 | 38 | 10*10.5 | 56 | 10*12.5 | 70 |
| 8.2 | 8*10.5 | 64 | 8*12.5 | 43 | 10*10.5 | 50 | 10*12.5 | 73 | 10*12.5 | 68 |
| 10 | 8*12.5 | 59 | 10*10.5 | 53 | 10*12.5 | 72 | 10*12.5 | 71 | 10*12.5 | 65 |
| 15 | 10*12.5 | 79 | 10*12.5 | 75 | | | | | | |
| 22 | 10*12.5 | 72 | | | | | | | | |

■ 额定纹波电流补偿系数

Rated ripple current compensation coefficient

| Frequency 频率 | 50Hz | 120Hz | 300Hz | 1KHz | ≥ 10KHz |
|---|---|---|---|---|---|
| Coefficient 系数 | 0.80 | 1.00 | 1.25 | 1.40 | 1.60 |