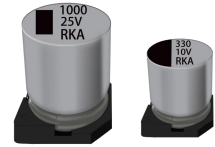


VZR Series 片式铝电解电容器低阻抗长寿命品

Long Life Aluminum Electrolytic Capacitor of V-chip Type



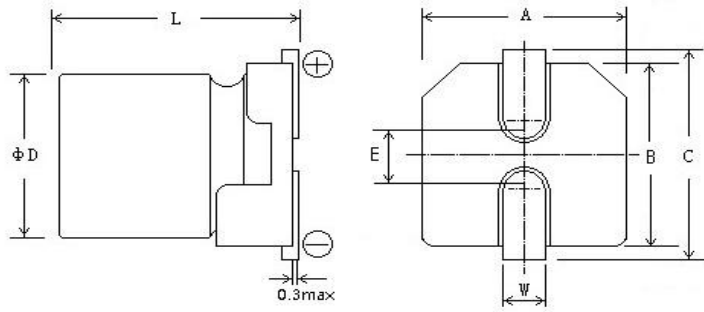
- 适用于回流焊 ● 适用于高密度表面组装
- 性能稳定、可靠性高。 ● 低阻抗品 ● 寿命: +105℃, 5000~10000 小时。
- Reflow soldering is available ● Available for high density surface mounting
- High stability and reliability ● Lower Impedance ● Lifetime: +105℃ 5000~10000 Hrs.



主要技术性能 Specifications

| 使用温度范围 Operating Temperature Range | -40~+105℃ | | | | | | | | | | | | | | | | | | | | |
|--|--|--|------|-------|--------|--|------|-----------|--|-----------------|--------------|-------|------|-------|------|----------------|--|------|--------------------|--|-------|
| 额定电压范围 Rated Voltage Range | 6.3~50V DC | | | | | | | | | | | | | | | | | | | | |
| 标称电容量允许偏差 Capacitance Tolerance | ±20% (120Hz, 20℃) | | | | | | | | | | | | | | | | | | | | |
| 漏电流(20℃) Leakage Current | $I \leq 0.01CV(\mu A)$ 或 $3 \mu A$ 取较大者, (2 分钟) $I \leq 0.01CV(\mu A)$ or $3 \mu A$ Whichever is greater (after 2 minutes) I=Leakage Current(μA), C=Capacitance(μF), V=Rated DC Working Voltage(V) | | | | | | | | | | | | | | | | | | | | |
| 损耗角正切值 Dissipation Factor (120Hz 20℃) | Rated Voltage (Vdc) | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | |
| | ϕ 6.3~10 | 0.32 | 0.28 | 0.26 | 0.16 | 0.14 | 0.14 | | | | | | | | | | | | | | |
| | ϕ 12.5~18 | 0.30 | 0.26 | 0.22 | 0.16 | 0.14 | 0.12 | | | | | | | | | | | | | | |
| 0.02 is added to every 1000 μF increase over 1000 μF | | | | | | | | | | | | | | | | | | | | | |
| 温度特性 (120Hz) Temperature Characteristics Impedance Ratio (120Hz) | WV | 6.3 | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | |
| | Z _{-40℃} /Z _{+20℃} | 4 | 4 | 4 | 4 | 3 | 3 | | | | | | | | | | | | | | |
| 耐久性 Load Life | 在 105℃ 的规定时间内施加额定电压后, 电容器应满足以下要求。 After applying rated voltage for specified time at 105℃, the capacitors shall meet the following requirements. | | | | | | | | | | | | | | | | | | | | |
| | 电容量变化率 Capacitance Change | $\leq \pm 30\%$ 初始测量值 $\leq \pm 30\%$ of Initial measured value | | | | <table border="1"> <tr> <th colspan="2">Case Size</th> <th>Life Time (hrs)</th> </tr> <tr> <td rowspan="2">$\phi D=6.3$</td> <td>L=6.0</td> <td>5000</td> </tr> <tr> <td>L=7.7</td> <td>6000</td> </tr> <tr> <td colspan="2">$\phi D=8, 10$</td> <td>8000</td> </tr> <tr> <td colspan="2">$\phi D \geq 12.5$</td> <td>10000</td> </tr> </table> | | Case Size | | Life Time (hrs) | $\phi D=6.3$ | L=6.0 | 5000 | L=7.7 | 6000 | $\phi D=8, 10$ | | 8000 | $\phi D \geq 12.5$ | | 10000 |
| Case Size | | Life Time (hrs) | | | | | | | | | | | | | | | | | | | |
| $\phi D=6.3$ | L=6.0 | 5000 | | | | | | | | | | | | | | | | | | | |
| | L=7.7 | 6000 | | | | | | | | | | | | | | | | | | | |
| $\phi D=8, 10$ | | 8000 | | | | | | | | | | | | | | | | | | | |
| $\phi D \geq 12.5$ | | 10000 | | | | | | | | | | | | | | | | | | | |
| | 漏电流值 Leakage | \leq 规定值 \leq The specified value | | | | | | | | | | | | | | | | | | | |
| | 损耗角正切值 Dissipation Factor | ≤ 3 倍规定值 $\leq 300\%$ of the specified value | | | | | | | | | | | | | | | | | | | |
| 高温贮存 Shelf Life (105℃) | 试验时间: 1000 小时, 其他项目与耐久性相同。电压应用处理: 根据 JIS C5101-4 4.1 Test time : 1000hours ; other items are same as the endurance. Voltage application treatment : According to JIS C5101-4 4.1 | | | | | | | | | | | | | | | | | | | | |
| 额定纹波电流频率系数 Coefficient of Frequency for Rated Ripple Current | Frequency | 120Hz | 1KHz | 10KHz | 100KHz | | | | | | | | | | | | | | | | |
| | Coefficient | 10~33 μF | 0.45 | 0.75 | 0.90 | 1.00 | | | | | | | | | | | | | | | |
| | | 47~100 μF | 0.50 | 0.80 | 0.95 | 1.00 | | | | | | | | | | | | | | | |
| | | 220~8200 μF | 0.60 | 0.85 | 0.95 | 1.00 | | | | | | | | | | | | | | | |

■外形图 Outline Drawing



单位 Unit : mm

| Size | 6.3×6.0 | 6.3×7.7 | 8×10.2 | 10×10.2 | 12.5×13.5 | 12.5×16 | 16×16.5 | 16×21.5 | 18×16.5 | 18×21.5 |
|---------|---------|---------|---------|---------|-----------|---------|---------|---------|---------|---------|
| A/B±0.2 | 6.6 | 6.6 | 8.3 | 10.3 | 13.0 | 13.0 | 17.0 | 17.0 | 19.0 | 19.0 |
| D±0.5 | 6.3 | 6.3 | 8.0 | 10 | 12.5 | 12.5 | 16.0 | 16.0 | 18.0 | 18.0 |
| E±0.2 | 2.2 | 2.2 | 3.1 | 4.5 | 5.2 | 5.2 | 6.5 | 6.5 | 6.5 | 6.5 |
| L | 6.0 | 7.7 | 10.2 | 10.2 | 13.5 | 16.0 | 16.5 | 21.5 | 16.5 | 21.5 |
| C±0.2 | 7.3 | 7.3 | 9.0 | 11.0 | 13.8 | 13.8 | 18 | 18 | 20 | 20 |
| W | 0.5~0.9 | | 0.8~1.1 | | 1.1~1.4 | | | | | |

■ 规格壳号、最大允许纹波电流及阻抗值

Standard sizes & Maximum permissible ripple current & impedance

| WV Cap(μF) | 6.3V | | | 10V | | | 16V | | |
|---------------|--------------|--------------|-----------|--------------|--------------|-----------|--------------|--------------|-----------|
| | ΦD×L (mm) | Z max (Ω) | I (mA) | ΦD×L (mm) | Z max (Ω) | I (mA) | ΦD×L (mm) | Z max (Ω) | I (mA) |
| 330 | | | | 8×10.2 | 0.15 | 600 | 8×10.2 | 0.15 | 600 |
| 470 | 8×10.2 | 0.15 | 600 | | | | 10×10.2 | 0.12 | 850 |
| 680 | | | | 10×10.2 | 0.12 | 850 | | | |
| 820 | 10×10.2 | 0.12 | 850 | | | | | | |
| 1500 | | | | | | | 12.5×13.5 | 0.092 | 950 |
| 1800 | | | | 12.5×13.5 | 0.092 | 950 | 12.5×16 | 0.074 | 1200 |
| 2200 | 12.5×13.5 | 0.092 | 950 | 12.5×16 | 0.074 | 1200 | 16×16.5 | 0.066 | 1450 |
| 2700 | 12.5×16 | 0.074 | 1200 | | | | | | |
| 3300 | | | | 16×16.5 | 0.066 | 1450 | 18×16.5 | 0.064 | 1550 |
| 3900 | 16×16.5 | 0.066 | 1450 | | | | | | |
| 4700 | | | | 18×16.5 | 0.064 | 1550 | 16×21.5 | 0.041 | 2000 |
| 5600 | 18×16.5 | 0.064 | 1550 | 16×21.5 | 0.041 | 2000 | 18×21.5 | 0.039 | 2150 |
| 6800 | 16×21.5 | 0.041 | 2000 | 18×21.5 | 0.039 | 2150 | | | |
| 8200 | 18×21.5 | 0.039 | 2150 | | | | | | |

I~额定纹波电流 Rated ripple current: (mA, 105°C, 100KHz), Z 阻抗值 Impedance: (Ω, 20°C, 100KHz)

■ 规格壳号、最大允许纹波电流及阻抗值

Standard sizes & Maximum permissible ripple current & impedance

| wv Cap(μF) | 25V | | | 35V | | | 50V | | |
|---------------|--------------|--------------|-----------|--------------|--------------|-----------|--------------|--------------|-----------|
| | ΦD×L (mm) | Z max (Ω) | I (mA) | ΦD×L (mm) | Z max (Ω) | I (mA) | ΦD×L (mm) | Z max (Ω) | I (mA) |
| 10 | | | | 6.3×6.0 | 1 | 140 | 6.3×6.0 | 1 | 140 |
| 22 | | | | 6.3×6.0 | 1 | 140 | | | |
| 33 | | | | 6.3×6.0 | 1 | 140 | 6.3×7.7 | 0.7 | 230 |
| 47 | | | | 6.3×7.7 | 0.7 | 230 | 8×10.2 | 0.36 | 350 |
| 100 | 6.3×7.7 | 0.7 | 230 | 8×10.2 | 0.15 | 600 | 10×10.2 | 0.25 | 670 |
| 220 | 8×10.2 | 0.15 | 600 | 10×10.2 | 0.12 | 850 | | | |
| 330 | 10×10.2 | 0.12 | 850 | | | | 12.5×13.5 | 0.18 | 850 |
| 390 | | | | | | | 12.5×16 | 0.15 | 950 |
| 470 | | | | 12.5×13.5 | 0.092 | 950 | 16×16.5 | 0.12 | 1200 |
| 680 | | | | 12.5×16 | 0.074 | 1200 | | | |
| 820 | | | | | | | 18×16.5 | 0.12 | 1300 |
| 1000 | 12.5×13.5 | 0.092 | 950 | 16×16.5 | 0.066 | 1450 | 16×21.5 | 0.08 | 1600 |
| 1200 | 12.5×16 | 0.074 | 1200 | | | | | | |
| 1500 | 16×16.5 | 0.066 | 1450 | 18×16.5 | 0.064 | 1550 | 18×21.5 | 0.072 | 1650 |
| 2200 | 18×16.5 | 0.064 | 1550 | 16×21.5 | 0.041 | 2000 | | | |
| 2700 | 16×21.5 | 0.041 | 2000 | 18×21.5 | 0.039 | 2150 | | | |
| 3300 | 18×21.5 | 0.039 | 2150 | | | | | | |

I~额定纹波电流 Rated ripple current: (mA, 105°C, 100KHz), Z 阻抗值 Impedance: (Ω, 20°C, 100KHz)