

VU Series

性能特点 Feature

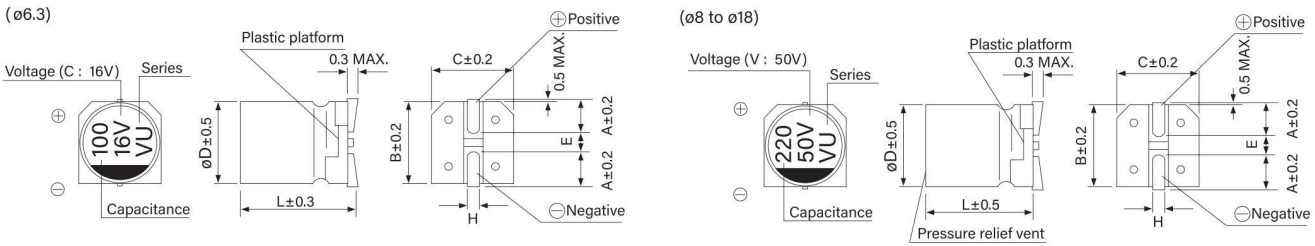
- 125°C 1000~2000 小时保证品 load life of 1000-2000 hours at 125°C
- 产品直径 Case diameter: ø6.3mm -ø18mm.
- 适用于高温用途 available for high tomperature.
- ROHS 指令已对应完毕 Adapted to the ROHS directive.



技术性能 Specifications

| 项目 Item                                                      | 特性 Performance Characteristics                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      |      |      |      |      |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|
| 使用温度范围 Operating temperature range                           | -55~+125°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |      |      |      |      |
| 额定电压范围 Rated voltage range                                   | 10~50V                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |      |      |      |      |      |
| 标称容量范围 Nominal capacitance range                             | 22~4700μF                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |      |      |      |      |      |
| 标称容量允许偏差 Capacitance tolerance                               | ±20%(120Hz, +20°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                               |      |      |      |      |      |
| 漏电流 Leakage current                                          | $I \leq 0.01C_R V_R$ (μA) or 3(μA) 2 分钟 取较大者 $C_R$ : 标称容量 (μF) $U_R$ : 额定电压 (V)<br>( at 20°C ,after 2 minutes ) (whichever is greater) $C_R$ : Nominal Capacitance $U_R$ :Rated voltage(V)                                                                                                                                                                                                                                                                                       |      |      |      |      |      |
| 损耗角正切值 ( tg δ) Dissipation factor<br>(+20°C~120Hz)           | $U_R$ (V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10   | 16   | 25   | 35   | 50   |
|                                                              | tg δ                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.32 | 0.24 | 0.21 | 0.18 | 0.15 |
| 耐久性 Load life                                                | +125°C 施加额定电压，电容器应满足以下要求：<br>Application of rated voltage at 125°C, the capacitor shall meet the following requirement:<br>规定时间 Specified time øD ≤ 8×6.5 1000h; øD ≥ 8×10.5 2000h<br>电容量变化率 Capacitance change : ±30% 初始测量值以内 Within ±30% of the initial value<br>漏电流 Leakage current : ≤初始规定值 ≤ the initial specified value<br>损耗角正切值 Dissipation factor : ≤ 300% 初始规定值 ≤ 300% of the initial specified value                                                                  |      |      |      |      |      |
| 高温储存 Shelf life                                              | +105°C 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°C, the capacitors shall meet the requirement of load life aboveo                                                                                                                                                                                                                                                                                                                                       |      |      |      |      |      |
| 低温特性 Low Temperature Stability<br>阻抗比 Impedance Ratio(120Hz) | $U_R$ (V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 10   | 16   | 25   | 35   | 50   |
|                                                              | Z-25°C/Z+20°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 6    | 5    | 4    | 3    | 3    |
|                                                              | Z-40°C/Z+20°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12   | 8    | 6    | 4    | 4    |
| 耐焊接热 Resistance to Soldering Heat                            | 在 250°C 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，<br>电容器应满足以下要求：<br>The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the<br>hot plate and restored at room temperature, they meet the following requiromant.<br>电容量变化率 Capacitance change : ±10% 初始测量值以内 Within ±10% of the initial value<br>漏电流 Leakage current : ≤初始规定值 ≤ the initial specified value<br>损耗角正切值 Dissipation factor : ≤初始规定值 ≤ the initial specified value |      |      |      |      |      |

尺寸和标记 Dimensions And Marking



| øD | 6.3×5.4 | 6.3×7.7 | 8×10.5  | 10×10.5 | 12.5×13.5 | 16×16.5 | 18×16.5 |
|----|---------|---------|---------|---------|-----------|---------|---------|
| A  | 2.4     | 2.4     | 2.9     | 3.2     | 4.8       | 5.8     | 6.8     |
| B  | 6.6     | 6.6     | 8.3     | 10.3    | 13        | 17      | 19      |
| C  | 6.6     | 6.6     | 8.3     | 10.3    | 13        | 17      | 19      |
| E  | 2.2     | 2.2     | 3.1     | 4.5     | 4.4       | 6.4     | 6.4     |
| L  | 5.4     | 7.7     | 10.5    | 10.5    | 13.5      | 16.5    | 21.5    |
| H  | 0.5~0.8 | 0.5~0.8 | 1.1~1.4 | 1.1~1.4 | 1.1~1.4   | 1.1~1.4 | 1.1~1.4 |

VU Series

标准评级 Standard Ratings

额定纹波电流 Rated Ripple Current (mA,+125°C,120Hz)

| 电压 $U_R$<br>容量 $C_R$ (μF) | 10                        |                         | 16                        |                         | 25                        |                         | 35                        |                         | 50                        |                         |
|---------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|
|                           | Case Size<br>øD×L<br>(mm) | Rated Ripple<br>Current | Case Size<br>øD×L<br>(mm) | Rated Ripple<br>Current | Case Size<br>øD×L<br>(mm) | Rated Ripple<br>Current | Case Size<br>øD×L<br>(mm) | Rated Ripple<br>Current | Case Size<br>øD×L<br>(mm) | Rated Ripple<br>Current |
| 22                        |                           |                         |                           |                         |                           |                         | 6.3×5.4                   | 50                      | 6.3×7.7                   | 75                      |
| 33                        |                           |                         | 6.3×5.4                   | 50                      | 6.3×5.4                   | 50                      | 6.3×7.7                   | 70                      | 8×10.5                    | 130                     |
| 47                        |                           |                         | 6.3×7.7                   | 70                      | 6.3×7.7                   | 70                      | 6.3×7.7                   | 75                      | 8×10.5                    | 130                     |
| 68                        | 6.3×5.4                   | 50                      | 6.3×7.7                   | 75                      | 6.3×7.7                   | 75                      | 8×10.5                    | 130                     | 10×10.5                   | 180                     |
| 100                       | 6.3×7.7                   | 75                      | 6.3×7.7                   | 75                      | 8×10.5                    | 130                     | 10×10.5                   | 180                     | 12.5×13.5                 | 357                     |
| 220                       | 8×10.5                    | 130                     | 10×10.5                   | 180                     | 10×10.5                   | 180                     | 12.5×13.5                 | 357                     | 12.5×16.5                 | 400                     |
| 330                       | 8×10.5                    | 130                     | 12.5×13.5                 | 480                     | 12.5×13.5                 | 480                     | 16×16.5                   | 650                     | 16×16.5                   | 650                     |
| 470                       | 12.5×13.5                 | 480                     | 12.5×13.5                 | 480                     | 12.5×13.5                 | 480                     | 16×16.5                   | 650                     | 16×16.5                   | 650                     |
| 680                       | 12.5×13.5                 | 480                     | 12.5×13.5                 | 480                     | 12.5×16.5                 | 585                     | 16×16.5                   | 650                     | 18×16.5                   | 855                     |
| 1000                      | 12.5×16.5                 | 585                     | 12.5×16.5                 | 585                     | 16×16.5                   | 650                     | 18×16.5                   | 855                     |                           |                         |
| 1500                      | 12.5×16.5                 | 585                     | 16×16.5                   | 650                     | 18×16.5                   | 855                     |                           |                         |                           |                         |
| 2200                      | 16×16.5                   | 650                     | 18×16.5                   | 855                     |                           |                         |                           |                         |                           |                         |
| 3300                      | 18×16.5                   | 855                     |                           |                         |                           |                         |                           |                         |                           |                         |
| 4700                      | 18×16.5                   | 855                     |                           |                         |                           |                         |                           |                         |                           |                         |

\* 支持客户根据需求定制 Support Customer Customization According To Demand

允许纹波电流的频率校正系数 Frequency Correction Factor Of Allowable Ripple Current

|                |      |       |       |      |           |
|----------------|------|-------|-------|------|-----------|
| Frequency 频率   | 50Hz | 120Hz | 300Hz | 1KHz | 10K~100Hz |
| Coefficient 系数 | 0.70 | 1.00  | 1.17  | 1.36 | 1.50      |