

VXE

特点 Features

- 保证105°C 3000~5000小时。Endurance 3000~5000h at 105°C.
- 额定电压范围: 6.3~100V。Rated Voltage Range:6.3~100V.
- 宽温度、长寿命品。Wide temperature ,Long life Type.
- 满足RoHS。RoHS Compliant.
- 满足AEC-Q200认证。AEC-Q200 Compliant.



主要技术性能 Specifications

| 项目 Items | 特性 Performance Characteristics | | | | | | | | | | |
|--|--|--|------|------|------|------|------|------|------|------|--------------------------|
| 类别温度范围 Category Temperature Range | -55~+105°C | | | | | | | | | | |
| 额定电压范围 Rated Voltage(U _R) | 6.3 ~ 100V | | | | | | | | | | |
| 标称容量范围 Nominal Capacitance Range(C _R) | 4.7~ 3300µF | | | | | | | | | | 120Hz, +20°C |
| 标称容量允许偏差 Allowed Capacitance Tolerance(C _T) | ±20%(M) | | | | | | | | | | 120Hz, +20°C |
| 漏电流 Leakage Current(I _L) | ≤0.01C _R U _R 或者3µA取较大值 (Whichever is greater) | | | | | | | | | | +20°C After 2 minutes |
| 损耗角正切值 Tangent of loss angle(Tanδ) | U _R (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | Max. 120Hz, +20°C |
| | Tanδ | 0.30 | 0.24 | 0.20 | 0.16 | 0.14 | 0.12 | 0.09 | 0.08 | 0.07 | |
| 低温特性 Characteristics at Low Temperature | U _R (V) | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 80 | 100 | Max. 120Hz |
| | Z-25°C / Z+20°C | 4 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | |
| | Z-55°C / Z+20°C | 10 | 7 | 5 | 3 | 3 | 3 | 3 | 3 | 3 | |
| 耐久性 Load Life | +105°C, 连续施加额定电压5000小时 (ΦD=4, 5和6.3为3000小时), 恢复16小时后: After applying rated voltage for 5000 hours (3000 hours for ΦD = 4, 5 and 6.3) at 105°C and then recovery 16 hours: | | | | | | | | | | |
| | 容量变化率 Capacitance Change | ±30%初始值以内 Within ±30% of the initial value | | | | | | | | | |
| | 损耗角正切值 Tanδ | ≤ 300%初始规定值 Not more than 300% of specified value | | | | | | | | | |
| | 漏电流 Leakage Current | ≤ 初始规定值 Not more than specified value | | | | | | | | | |
| 高温贮存 Shelf Life | +105°C, 1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then recovery 16 hours: | | | | | | | | | | |
| | 容量变化率 Capacitance Change | ±30%初始值以内 Within ±30% of the initial value | | | | | | | | | |
| | 损耗角正切值 Tanδ | ≤ 300%初始规定值 Not more than 300% of specified value | | | | | | | | | |
| | 漏电流 Leakage Current | ≤ 初始规定值 Not more than specified value | | | | | | | | | |
| 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, 电容器应满足以下要求: The capacitors shall be kept on the hot plate maintained at 250°C for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement. | | | | | | | | | | |
| | 容量变化率 Capacitance Change | ±10%初始值以内 Within ±10% of the initial value | | | | | | | | | |
| | 损耗角正切值 Tanδ | ≤初始规定值 Not more than specified value | | | | | | | | | |
| | 漏电流 Leakage Current | ≤ 初始规定值 Not more than specified value | | | | | | | | | |

尺寸图 Dimensional drawings

Fig.1

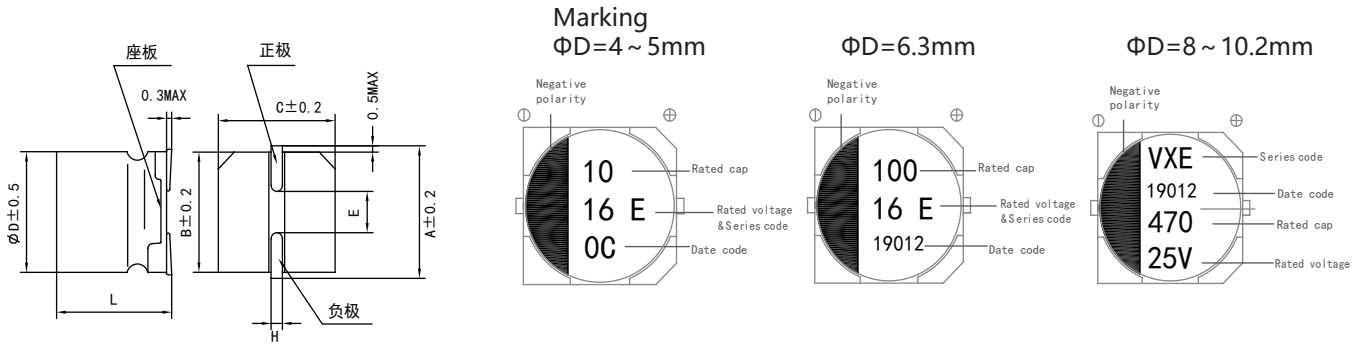
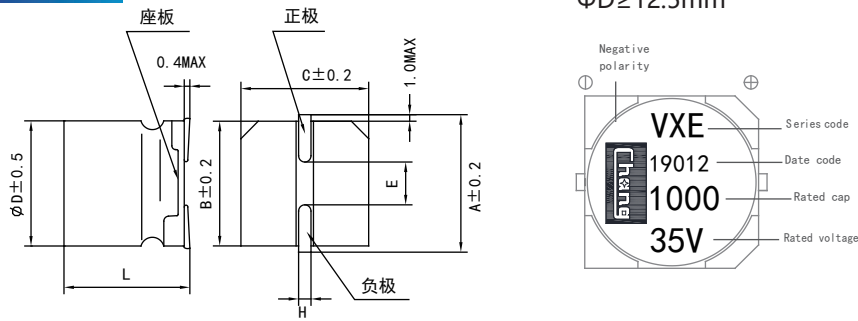


Fig.2



尺寸表 size table

单位 Unit: mm

| ΦD | L | A | B | C | E±0.2 | H | Fig.No. |
|------|----------|------|------|------|-------|---------|---------|
| 4 | 5.8±0.3 | 5.0 | 4.3 | 4.3 | 1.0 | 0.5~0.8 | 1 |
| 5 | 5.8±0.3 | 6.0 | 5.3 | 5.3 | 1.3 | | |
| 6.3 | 5.8±0.3 | 7.3 | 6.6 | 6.6 | 2.2 | | |
| 6.3 | 7.7±0.3 | 7.3 | 6.3 | 6.3 | 2.2 | | |
| 8 | 6.5±0.5 | 8.9 | 8.3 | 8.3 | 2.3 | 0.8~1.1 | |
| 8 | 10.5±0.5 | 9.0 | 8.3 | 8.3 | 3.1 | | |
| 10 | 10.5±0.5 | 11.0 | 10.3 | 10.3 | 4.5 | 1.1~1.4 | 2 |
| 12.5 | 13.5±0.5 | 13.6 | 13 | 13 | 4.5 | | |
| 12.5 | 16±0.5 | 13.6 | 13 | 13 | 4.5 | | |
| 16 | 16.5±0.5 | 18.0 | 17 | 17 | 6.4 | | |
| 16 | 21.5±0.5 | 18.0 | 17 | 17 | 6.4 | | |
| 18 | 16.5±0.5 | 20.0 | 19 | 19 | 6.4 | | |
| 18 | 21.5±0.5 | 20.0 | 19 | 19 | 6.4 | | |

规格特性表
Table of specifications and characteristics

| C _R (μF) | 6.3V | | 10V | | 16V | | 25V | | 35V | | 50V | |
|---------------------|---------------|--|---------------|--|---------------|--|---------------|--|---------------|--|---------------|--|
| | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA |
| 4.7 | | | | | | | 4*5.8 | 16 | 4*5.8 | 14 | 5*5.8 | 21 |
| 10 | | | | | 4*5.8 | 20 | 5*5.8 | 30 | 5*5.8 | 30 | 6.3*5.8 | 35 |
| 22 | 4*5.8 | 23 | 4*5.8 | 30 | 5*5.8 | 35 | 6.3*5.8 | 45 | 6.3*5.8 | 50 | 6.3*7.7 | 52 |
| 33 | 5*5.8 | 40 | 5*5.8 | 40 | 6.3*5.8 | 50 | 6.3*5.8 | 50 | 6.3*5.8 | 45 | 6.3*7.7 | 55 |
| 47 | 5*5.8 | 45 | 6.3*5.8 | 55 | 6.3*5.8 | 60 | 6.3*7.7 | 65 | 6.3*7.7 | 65 | 8*10.5 | 98 |
| 100 | 6.3*5.8 | 70 | 6.3*5.8 | 58 | 6.3*7.7 | 90 | 6.3*7.7 | 100 | 8*10.5 | 100 | 10*10.5 | 118 |
| 220 | 6.3*7.7 | 105 | 6.3*7.7 | 89 | 8*10.5 | 250 | 8*10.5 | 145 | 10*10.5 | 230 | 12.5*13.5 | 280 |
| 330 | 8*10.5 | 245 | 8*10.5 | 170 | 8*10.5 | 260 | 10*10.5 | 250 | 10*10.5 | 250 | 12.5*16 | 360 |
| 470 | 10*10.5 | 350 | 8*10.5 | 160 | 10*10.5 | 310 | 10*10.5 | 300 | 12.5*13.5 | 330 | 16*16.5 | 510 |
| 1000 | 10*10.5 | 350 | 10*10.5 | 310 | 12.5*13.5 | 450 | 12.5*13.5 | 330 | 16*16.5 | 700 | 18*16.5 | 780 |
| 2200 | | | | | 12.5*16 | 550 | 16*16.5 | 680 | 18*21.5 | 1080 | | |
| 3300 | | | | | 16*21.5 | 880 | 18*21.5 | 1090 | | | | |

| C _R (μF) | 63V | | 80V | | 100V | |
|---------------------|---------------|--|---------------|--|---------------|--|
| | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA | ΦDxL mm*mm | I _{ACR} 120Hz 105°C mA |
| 1 | 4*5.8 | 8 | | | | |
| 2.2 | 4*5.8 | 12 | | | | |
| 3.3 | 4*5.8 | 17 | | | | |
| 4.7 | 5*5.8 | 22 | | | | |
| 10 | 6.3*7.7 | 45 | | | | |
| 22 | 8*10.5 | 103 | | | | |
| 33 | 8*10.5 | 100 | 8*10.5 | 55 | 10*10.5 | 88 |
| 47 | 10*10.5 | 175 | 10*10.5 | 88 | 12.5*13.5 | 165 |
| 100 | 12.5*13.5 | 290 | 12.5*13.5 | 165 | 12.5*16 | 220 |
| 220 | 12.5*16 | 370 | 16*16.5 | 270 | 16*16.5 | 270 |
| 330 | 16*16.5 | 405 | 18*16.5 | 370 | 18*16.5 | 370 |
| 470 | 18*16.5 | 468 | | | | |

额定纹波电流的频率系数
Frequency coefficient of ripple current

| | | | | | |
|------------------|------|------|------|------|------|
| Frequency (Hz) | 50 | 120 | 300 | 1K | ≥10K |
| Coefficient (kf) | 0.70 | 1.00 | 1.17 | 1.36 | 1.50 |