

VTK

特点 Features

- 保证150°C 1000小时。Endurance 1000h at 150°C.
- 额定电压范围：10~50V。Rated Voltage Range:10~50V.
- 超高温品。Ultra-high temp Type.
- 满足RoHS。RoHS Compliant.
- 满足AEC-Q200认证。AEC-Q200 Compliant.

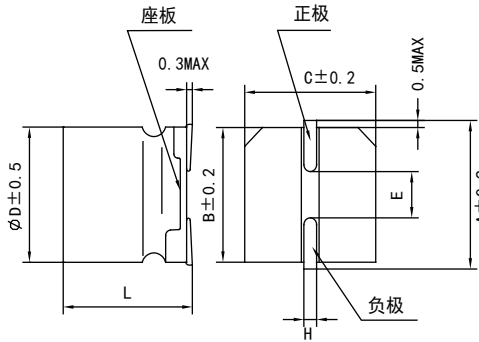


主要技术性能 Specifications

| 项目 Items | 特性 Performance Characteristics | | | | | | | | | | | | | | | | | | | | | |
|--|---|---|------|------|------|----|----|-----------------|-------|------|------|------|------|----------|------|----------|------|------|------|----------------------|---|---------------|
| 类别温度范围 Category Temperature Range | -40°C ~ +150°C(Φ8~10), -55°C ~ +150°C(Φ12.5~18) | | | | | | | | | | | | | | | | | | | | | |
| 额定电压范围 Rated Voltage(U _R) | 10 ~ 50V | | | | | | | | | | | | | | | | | | | | | |
| 标称容量范围 Nominal Capacitance Range(C _n) | 33 ~ 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) | ≤0.03C _R U _R 或者4μA 取较大值 (Whichever is greater) | | | | | | | | | | | | | | | | | | | | | |
| 损耗角正切值 Tangent of loss angle(Tanδ) | <table border="1"> <thead> <tr> <th>U_R(V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Φ8~10</td> <td>0.26</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.14</td> </tr> <tr> <td>Φ12.5~18</td> <td>0.22</td> <td>0.18</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> </tr> </tbody> </table> | U _R (V) | 10 | 16 | 25 | 35 | 50 | Φ8~10 | 0.26 | 0.20 | 0.16 | 0.14 | 0.14 | Φ12.5~18 | 0.22 | 0.18 | 0.16 | 0.14 | 0.12 | Max. 120Hz, +20°C | | |
| U _R (V) | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | |
| Φ8~10 | 0.26 | 0.20 | 0.16 | 0.14 | 0.14 | | | | | | | | | | | | | | | | | |
| Φ12.5~18 | 0.22 | 0.18 | 0.16 | 0.14 | 0.12 | | | | | | | | | | | | | | | | | |
| 低温特性 Characteristics at Low Temperature | <table border="1"> <thead> <tr> <th>U_R(V)</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> </tr> </thead> <tbody> <tr> <td>Z-40°C / Z+20°C</td> <td>Φ8~10</td> <td>10</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> </tr> <tr> <td></td> <td>Φ12.5~18</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> </tr> </tbody> </table> | U _R (V) | 10 | 16 | 25 | 35 | 50 | Z-40°C / Z+20°C | Φ8~10 | 10 | 8 | 6 | 4 | 4 | | Φ12.5~18 | 8 | 6 | 4 | 4 | 4 | Max. 120Hz |
| U _R (V) | 10 | 16 | 25 | 35 | 50 | | | | | | | | | | | | | | | | | |
| Z-40°C / Z+20°C | Φ8~10 | 10 | 8 | 6 | 4 | 4 | | | | | | | | | | | | | | | | |
| | Φ12.5~18 | 8 | 6 | 4 | 4 | 4 | | | | | | | | | | | | | | | | |
| 耐久性 Load Life | +150°C, 连续施加额定电压1000小时, 恢复16小时后: After applying rated voltage for 1000 hours at 150°C and then recovery 16 hours: | | | | | | | | | | | | | | | | | | | | | |
| | 电容量变化率 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 | | | | | | | | | | | | | | | | | | | | |
| 高温贮存 Shelf Life | +150°C, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +150°C and then recovery 16 hours: | | | | | | | | | | | | | | | | | | | | | |
| | 电容量变化率 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 | | | | | | | | | | | | | | | | | | | | |
| 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. | | | | | | | | | | | | | | | | | | | | | |
| | 电容量变化率 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



Marking
φD=8~10.2mm

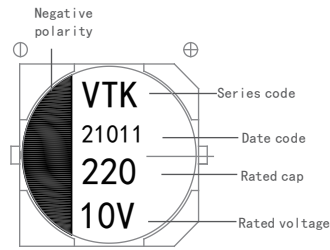
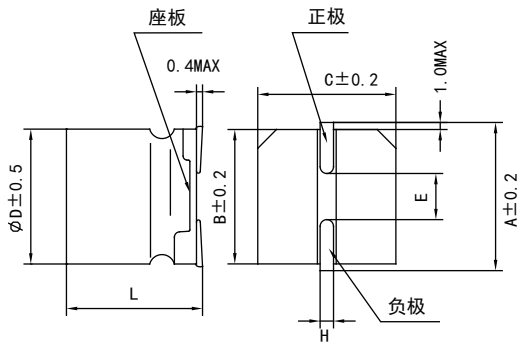
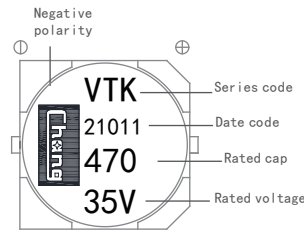


Fig.2



φD ≥ 12.5mm



尺寸表 size table

单位 Unit: mm

| φD | L | A | B | C | E±0.2 | H | Fig.No. |
|------|----------|------|------|------|-------|---------|---------|
| 8.2 | 10.5±0.5 | 9.0 | 8.3 | 8.3 | 3.1 | 0.8~1.1 | 1 |
| 10 | 10.5±0.5 | 11.0 | 10.3 | 10.3 | 4.5 | | |
| 12.5 | 13.5±0.5 | 13.6 | 13 | 13 | 4.5 | 1.1~1.4 | 2 |
| 12.5 | 16±0.5 | 13.6 | 13 | 13 | 4.5 | | |
| 16 | 16.5±0.5 | 18 | 17 | 17 | 6.4 | | |
| 16 | 21.5±0.5 | 18 | 17 | 17 | 6.4 | | |
| 18 | 16.5±0.5 | 20 | 19 | 19 | 6.4 | | |
| 18 | 21.5±0.5 | 20 | 19 | 19 | 6.4 | | |

规格特性表
Table of specifications and characteristics

| C _R (μF) | U _R (V) | 10V | | 16V | | 25V | | 35V | | 50V | |
|---------------------|--------------------|---------------|---|---------------|---|---------------|---|---------------|---|---------------|---|
| | | ΦDxL mm*mm | I _{ACR} 100KHz 150°C mA | ΦDxL mm*mm | I _{ACR} 100KHz 150°C mA | ΦDxL mm*mm | I _{ACR} 100KHz 150°C mA | ΦDxL mm*mm | I _{ACR} 100KHz 150°C mA | ΦDxL mm*mm | I _{ACR} 100KHz 150°C mA |
| 33 | | | | | | | | | | 8.2*10.5 | 70 |
| 47 | | | | | | | | 8.2*10.5 | 80 | 10*10.5 | 100 |
| 100 | | | | 8.2*10.5 | 110 | 8.2*10.5 | 110 | 10*10.5 | 120 | 12.5*13.5 | 420 |
| 220 | | 8.2*10.5 | 110 | 10*10.5 | 150 | 10*10.5 | 150 | 12.5*13.5 | 550 | 16*16.5 | 550 |
| 330 | | 10*10.5 | 150 | | | 12.5*13.5 | 650 | 12.5*13.5 | 650 | 16*21.5 | 650 |
| 470 | | | | 12.5*13.5 | 750 | 12.5*13.5 | 700 | 16*16.5 | 750 | 16*21.5 | 850 |
| 680 | | 12.5*13.5 | 800 | 12.5*13.5 | 800 | 16*16.5 | 800 | 16*21.5 | 950 | 18*21.5 | 1100 |
| 1000 | | 12.5*13.5 | 900 | 16*16.5 | 850 | 16*21.5 | 1000 | 18*21.5 | 1150 | | |
| 2200 | | 18*21.5 | 1350 | 18*21.5 | 1350 | | | | | | |
| 3300 | | 18*21.5 | 1400 | | | | | | | | |

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

| | | | | |
|------------------|------|------|------|-------|
| Frequency (Hz) | 120 | 300 | 1K | ≥ 10K |
| Coefficient (kf) | 0.67 | 0.79 | 0.91 | 1.00 |