## *VX* series

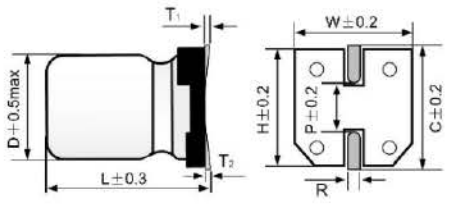

- **High reliability, High temperature　高可靠性，耐高温**
- **Load life of 2500 hours at 150℃　直流负载寿命 150℃-2500 小时**
- **Compliant to the RoHS2.0 directive (2011/65/EU)　符合 RoHS2.0 规范**
- **Suitable for High reliability requirement of Electronic Equipment　适合用于提高电子设备的可靠度**

## Specifications 系列参数

| Items　项目 | Characteristics　特性 | |
|---|---|---|
| Rated Voltage Range　额定电压范围 | 6.3V ~16V DC | |
| Capacitance Range　容量范围 | 33 ~ 1000μF | |
| Capacitance Tolerance　容量偏差 | M：±20% | |
| Operating Temp. Range　工作温度范围 | -55℃ ~+150℃ | |
| Dissipation Factor　损耗角正切 | Not to exceed the value specified　不超过规格值 | |
| Leakage Current　漏电流 | Not to exceed the value specified　(after 2 minutes)　不超过规格值（充电 2 分钟后测试） | |
| ESR（100K~300KHz）　等效串联电阻 | Not to exceed the value specified　不超过规格值 | |
| Endurance<br>150℃，2500h，Rated voltage applied<br>寿命：<br>150℃加载额定电压连续工作 2500 小时 | Capacitance Change　容量变化 | Within ±20% of the value before test　初始值±20%以内 |
| | Dissipation Factor　损耗角正切 | Not to exceed 150% of the value specified　不超过 1.5 倍规格值 |
| | ESR　等效串联电阻 | Not to exceed 150% of the value specified　不超过 1.5 倍规格值 |
| | Leakage current　漏电流 | Not to exceed the value specified　不超过规格值 |
| Moisture Resistance<br>85℃，RH85%，1000h，Rated voltage applied<br>耐湿性<br>85℃，RH85%加载额定电压连续工作 1000 小时 | Capacitance Change　容量变化 | Within ±20% of the value before test　初始值±20%以内 |
| | Dissipation Factor　损耗角正切 | Not to exceed 150% of the value specified　不超过 1.5 倍规格值 |
| | ESR　等效串联电阻 | Not to exceed 150% of the value specified　不超过 1.5 倍规格值 |
| | Leakage Current　漏电流 | Not to exceed the value specified　不超过规格值 |
| Resistance to Soldering Heat<br>After the recommended soldering conditions<br>耐焊接热<br>推荐焊接条件处理后测试 | Capacitance Change　容量变化 | Within ±5% of the value before test　初始值±5%以内 |
| | Dissipation Factor　损耗角正切 | Not to exceed the value specified　不超过规格值 |
| | ESR　等效串联电阻 | Not to exceed the value specified　不超过规格值 |
| | Leakage Current　漏电流 | Not to exceed the value specified　不超过规格值<br>(Charging treatment　充电处理) |

※When there is any doubt, measure after charging treatment below.
Charging treatment: at 150 ℃, Rated voltage is loaded for 30 minutes continuously.
如有疑义，请进行充电处理后再测试，测试条件：在 150℃环境温度下连续施加额定直流电压 30 分钟。

## Dimensions 尺寸(Unit单位:mm)




| ΦD | L | W | H | C | P | R | T1、T2 |
|---|---|---|---|---|---|---|---|
| 6.3 | 6.2 | 6.6 | 6.6 | 7.2 | 2.1 | 0.5 0.8 | 0.2max. |
| 6.3 | 7.7 | 6.6 | 6.6 | 7.2 | 2.1 | 0.5~0.8 | 0.2max. |
| 6.3 | 9 | 6.6 | 6.6 | 7.2 | 2.1 | 0.5~0.8 | 0.2max. |
| 8 | 9.2 | 8.3 | 8.3 | 9.0 | 3.2 | 0.8~1.1 | 0.2max. |
| 8 | 10.5 | 8.3 | 8.3 | 9.0 | 3.2 | 0.8~1.1 | 0.2max. |
| 8 | 12.2 | 8.3 | 8.3 | 9.0 | 3.2 | 0.8~1.1 | 0.2max. |
| 10 | 10.5 | 10.3 | 10.3 | 11.0 | 4.6 | 0.8~1.1 | 0.2max. |
| 10 | 12.8 | 10.3 | 10.3 | 11.0 | 4.6 | 0.8~1.1 | 0.2max. |

## Capacitance List 容量对照表

| W.V（S.V） / SIZE | 2.5（2.9） | 6.3（7.2） | 16（18） | 25（29） |
|---|---|---|---|---|
| 6.3×6.2 | 390 ~ 560 μ F | 220 ~ 330 μ F | 100 ~ 120 μ F | 33 ~ 47 μ F |
| 6.3×7.7 | 560 ~ 820 μ F | 330 ~ 560 μ F | 150 ~ 180 μ F | 47 ~ 68 μ F |
| 6.3×9 | 680 ~ 1000 μ F | 470 ~ 680 μ F | 180 ~ 270 μ F | 56 ~ 82 μ F |
| 8×9.2 | | | 270 ~ 470 μ F | 82 ~ 120 μ F |
| 8×10.5 | | | 330 ~ 560 μ F | 100 ~ 180 μ F |
| 8×12.2 | | | 330 ~ 560 μ F | 120 ~ 180 μ F |
| 10×10.5 | | | 390 ~ 680 μ F | 120 ~ 220 μ F |
| 10×12.8 | | | 470 ~ 1000 μ F | 180 ~ 330 μ F |

## Characteristics List 规格特性表

| W.V.<br>工作电压<br>(V) | Capacitance<br>容量<br>(μF) | L.C.<br>漏电流<br>(μA,2min) | tgδ<br>损耗角正切<br>(120Hz,20℃) | ESR<br>等效串联电阻<br>(mΩ,100kHz) | Rated Ripple Current<br>额定纹波电流<br>(mA,r.m.s) | Size<br>尺寸<br>ΦD×L(mm) | Part Number<br>物料编码 |
|---|---|---|---|---|---|---|---|
| 2.5 | 560 | 300 | 0.08 | 12 | 1684 | 6.3×6.2 | PVX561M2R5E62TR□□□□ |
| | 820 | 410 | 0.08 | 9 | 2149 | 6.3×7.7 | PVX821M2R5E77TR□□□□ |
| | 1000 | 500 | 0.08 | 7 | 2556 | 6.3×9 | PVX102M2R5E09TR□□□□ |
| 6.3 | 330 | 415.8 | 0.08 | 15 | 1516 | 6.3×6.2 | PVX331M6R3E62TR□□□□ |
| | 470 | 592.2 | 0.08 | 12 | 1940 | 6.3×7.7 | PVX471M6R3E77TR□□□□ |
| | 560 | 705.6 | 0.08 | 8 | 2510 | 6.3×9 | PVX561M6R3E09TR□□□□ |
| 16 | 100 | 320 | 0.10 | 25 | 1196 | 6.3×6.2 | PVX101M016E62TR□□□□ |
| | 150 | 480 | 0.10 | 15 | 1678 | 6.3×7.7 | PVX151M016E77TR□□□□ |
| | 270 | 864 | 0.10 | 15 | 1771 | 6.3×9 | PVX271M016E09TR□□□□ |
| | 330 | 1000 | 0.10 | 12 | 2149 | 8×9.2 | PVX331M016F92TR□□□□ |
| | 470 | 1000 | 0.10 | 12 | 2381 | 8×10.5 | PVX471M016F1ETR□□□□ |
| | 470 | 1000 | 0.10 | 12 | 2498 | 8×12.2 | PVX471M016F1CTR□□□□ |
| | 560 | 1000 | 0.10 | 12 | 2439 | 10×10.5 | PVX561M016G1ETR□□□□ |
| | 820 | 1000 | 0.10 | 10 | 2962 | 10×12.8 | PVX821M016G1DTR□□□□ |
| 25 | 47 | 329 | 0.10 | 40 | 1005 | 6.3×6.2 | PVX470M025E62TR□□□□ |
| | 68 | 476 | 0.10 | 35 | 1156 | 6.3×7.7 | PVX680M025E77TR□□□□ |
| | 82 | 574 | 0.10 | 30 | 1318 | 6.3×9 | PVX820M025E09TR□□□□ |
| | 100 | 700 | 0.10 | 22 | 1702 | 8×9.2 | PVX101M025F92TR□□□□ |
| | 150 | 1000 | 0.10 | 20 | 1957 | 8×10.5 | PVX151M025F1ETR□□□□ |
| | 180 | 1000 | 0.10 | 20 | 2073 | 8×12.2 | PVX181M025F1CTR□□□□ |
| | 220 | 1000 | 0.10 | 20 | 2015 | 10×10.5 | PVX221M025G1ETR□□□□ |
| | 330 | 1000 | 0.10 | 18 | 2329 | 10×12.8 | PVX331M025G1DTR□□□□ |

* For the last 4 digits of the part number, please refer to the part number system on page 178.

物料编码的最后 4 位，请参考 178 页物料编码系统。

## Frequency Coefficient for Ripple Current 纹波电流频率系数

| Frequency 频率 | 120Hz≤freq.<1KHz | 1KHz≤freq.<10KHz | 10KHz≤freq.<50KHz | 50KHz≤freq.<100KHz | 100KHz≤freq.<500KHz |
|---|---|---|---|---|---|
| Coefficient 系数 (C≤47μF) | 0.05 | 0.25 | 0.55 | 0.80 | 1.00 |
| Coefficient 系数 (C＞47μF) | 0.05 | 0.30 | 0.70 | 0.85 | 1.00 |