

VX series 150°C High Temperature



- SMD Type, High reliability, High temperature
 - Load life of 2500 hours at 150°C
 - Compliant to the RoHS2.0 directive (2011/65/EU)
 - Suitable for High reliability requirement of Electronic Equipment.
- 具有优异的热稳定性，工作温度可达 150°C，产品满足 RoHS2.0 指令，适用于提高电子设备的可靠度。

✧ Specifications

Items	Characteristics	
Operating Temp. Range	-55°C ~ +150°C	
Capacitance Range	100 ~ 1000µF	
Capacitance Tolerance	M : ±20%	
Rated Voltage Range	6.3V ~ 16V DC	
Dissipation Factor	Not to exceed the value specified	
Leakage Current	Not to exceed the value specified (after 2 minutes)	
ESR (100K~300KHz)	Not to exceed the value specified	
Endurance 150°C · 2500h · at rated voltage	Capacitance Change	Within ±20% of the value before test
	Dissipation Factor	Not to exceed 150% of the value specified
	ESR	Not to exceed 150% of the value specified
	Leakage current	Not to exceed the value specified
Moisture Resistance Stored at 85°C · RH 85% · 1000h	Capacitance Change	Within ±20% of the value before test
	Dissipation Factor	Not to exceed 150% of the value specified
	ESR	Not to exceed 150% of the value specified
Resistance to Soldering Heat After the recommended soldering conditions	Capacitance Change	Within ±5% of the value before test
	Dissipation Factor	Not to exceed the value specified
	ESR	Not to exceed the value specified
	Leakage Current	Not to exceed the value specified (Charging treatment)

※When there is any doubt, measure after charging treatment below.
Charging treatment: at 150 °C, Rated voltage is loaded for 30 minutes continuously.

✧ Dimensions (Unit:mm)

ΦD+0.5max.	6.3			8		10	
L±0.3	5.8	7.7	9	9.2	12.2	10.5	12.7
W±0.2	6.6			8.3		10.3	
H±0.2	6.6			8.3		10.3	
C±0.2	7.2			9.0		11.0	
P±0.2	2.1			3.2		4.6	
R	0.5 ~ 0.8			0.8 ~ 1.1		0.8 ~ 1.1	
T1、T2	0.2Max			0.2Max		0.2Max	

Recommended land pattern

ΦD	6.3.	8	10
a	2.1	2.8	4.3
b	3.5	4.2	4.4
c	1.6	1.9	1.9

✧ **Capacitance List**

SIZE \ W.V (S.V)	6.3 (7.2)	16 (18)			
6.3×5.8	220 ~ 330μF	100 ~ 150μF			
6.3×7.7	330 ~ 560μF	150 ~ 220μF			
6.3×9	470 ~ 680μF	180 ~ 270μF			
8×9.2		270 ~ 470μF			
8×12.2		330 ~ 680μF			
10×10.5		390 ~ 680μF			
10×12.7		470 ~ 1000μF			

✧ **Characteristics List**

W.V. (V)	Capacitance (μF)	L.C. (μA,2min)	tgδ (120Hz,20℃)	ESR (mΩ,100kHz)	Rated Ripple Current(mA,r.m.s)	Size ΦD×L(mm)	Part Number
6.3	330	207.9	0.08	15	1600	6.3×5.8	PVX331M6R3E58TR□□□□
	470	296.1	0.08	12	1600	6.3×7.7	PVX471M6R3E77TR□□□□
	560	352.8	0.08	8	2600	6.3×9	PVX561M6R3E09TR□□□□
16	100	160	0.10	25	1000	6.3×5.8	PVX101M016E58TR□□□□
	220	352	0.10	15	1500	6.3×7.7	PVX221M016E77TR□□□□
	270	432	0.10	15	1800	6.3×9	PVX271M016E09TR□□□□
	330	528	0.10	12	2000	8×9.2	PVX331M016F92TR□□□□
	470	752	0.10	12	2400	8×12.2	PVX471M016F1CTR□□□□
	560	896	0.10	12	3000	10×10.5	PVX561M016G1ETR□□□□
	820	1000	0.10	10	3400	10×12.7	PVX821M016G1DTR□□□□

* For the last 4 digits of the part number, please refer to the part number system on page 125.

✧ **Frequency Coefficient for Ripple Current**

Frequency	120Hz≤freq.<1KHz	1KHz≤freq.<10KHz	10KHz≤freq.<50KHz	50KHz≤freq.<100KHz	100KHz≤freq.<300KHz
Coefficient	0.05	0.3	0.7	0.85	1