

# VXF

## 特点 Features

- 保证125°C 1000~2000小时。Endurance 1000~2000h at 125°C.
- 额定电压范围：10~63V。Rated Voltage Range:10~63V.
- 高温长寿命品。High temperature, Long life Type.
- 满足RoHS。RoHS Compliant.
- 满足AEC-Q200认证。AEC-Q200 Compliant.

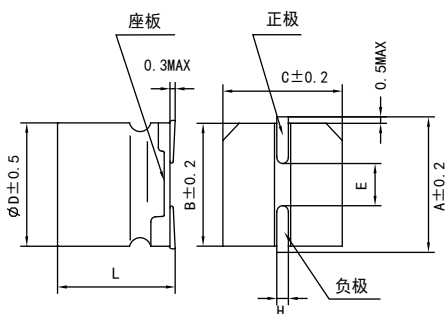


## 主要技术性能 Specifications

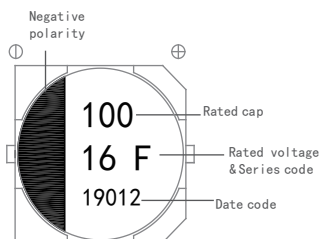
项目 Items	特性 Performance Characteristics																						
类别温度范围 Category Temperature Range	-40°C ~ +125°C																						
额定电压范围 Rated Voltage(U <sub>R</sub> )	10 ~ 63V																						
标称容量范围 Nominal Capacitance Range(C <sub>R</sub> )	10 ~ 4700μF	120Hz, +20°C																					
标称容量允许偏差 Allowed Capacitance Tolerance(C <sub>T</sub> )	±20%(M)	120Hz, +20°C																					
漏电流 Leakage Current(I <sub>L</sub> )	$\Phi 6.3 \sim 10$ : $\leq 0.01 C_R U_R$ 或者 $3\mu A$ 取较大值 (Whichever is greater) $\geq \Phi 12.5$ : $\leq 0.03 C_R U_R$ 或者 $4\mu A$ 取较大值 (Whichever is greater)																						
损耗角正切值 Tangent of loss angle(Tan $\delta$ )	<table border="1"> <tr> <td>U<sub>R</sub>(V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td>Tan<math>\delta</math></td> <td>0.30</td> <td>0.24</td> <td>0.20</td> <td>0.17</td> <td>0.14</td> <td>0.14</td> </tr> </table>	U <sub>R</sub> (V)	10	16	25	35	50	63	Tan $\delta$	0.30	0.24	0.20	0.17	0.14	0.14	+20°C After 2 minutes  Max. 120Hz, +20°C							
U <sub>R</sub> (V)	10	16	25	35	50	63																	
Tan $\delta$	0.30	0.24	0.20	0.17	0.14	0.14																	
低温特性 Characteristics at Low Temperature	<table border="1"> <tr> <td>U<sub>R</sub>(V)</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> </tr> <tr> <td>Z<sub>-25°C</sub> / Z<sub>+20°C</sub></td> <td>6</td> <td>5</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z<sub>-40°C</sub> / Z<sub>+20°C</sub></td> <td>12</td> <td>8</td> <td>6</td> <td>4</td> <td>4</td> <td>4</td> </tr> </table>	U <sub>R</sub> (V)	10	16	25	35	50	63	Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	6	5	4	3	3	3	Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	12	8	6	4	4	4	Max. 120Hz
U <sub>R</sub> (V)	10	16	25	35	50	63																	
Z <sub>-25°C</sub> / Z <sub>+20°C</sub>	6	5	4	3	3	3																	
Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	12	8	6	4	4	4																	
耐久性 Load Life	+125°C, 连续施加额定电压1000~2000小时, 恢复16小时后: After applying rated voltage for 1000~2000 hours at 125°C and then recovery 16 hours:																						
	规定时间 Specified time	$\Phi 6.3$ : 1000小时 $\geq \Phi 8$ : 2000小时																					
	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 Tan $\delta$	≤ 300%初始规定值 Not more than 300% of specified value																					
高温贮存 Shelf Life	+125°C, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +125°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 Tan $\delta$	≤ 300%初始规定值 Not more than 200% 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 Tan $\delta$	≤ 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=6.3mm



ΦD=8~10mm

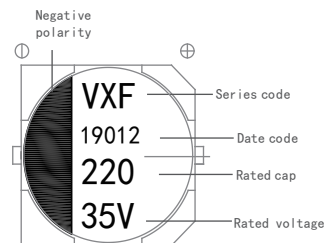
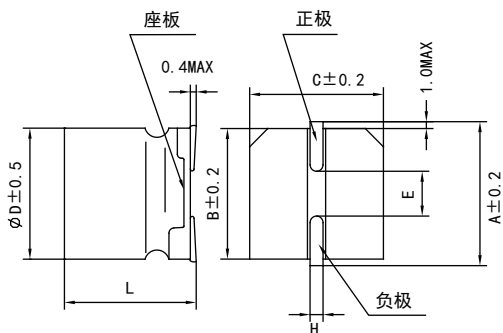
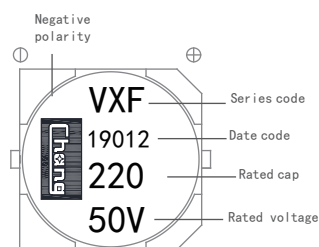


Fig.2



ΦD≥12.5mm



尺寸表 size table

单位 Unit: mm

ΦD	L	A	B	C	E±0.2	H	Fig.No.
6.3	5.8±0.3	7.3	6.6	6.6	2.2	0.5~0.8	1
6.3	7.7±0.3	7.3	6.3	6.3	2.2		
8	10.5±0.5	9.0	8.3	8.3	3.1	0.8~1.1	
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	18.0	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

U <sub>R</sub> (V) C <sub>R</sub> (μF)	10V		16V		25V		35V		50V	
	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 125°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 125°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 125°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 125°C mA	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 125°C mA
10							6.3*5.8	50	6.3*5.8	35
22					6.3*5.8	50	6.3*5.8	50	6.3*7.7	40
33			6.3*5.8	50	6.3*5.8	50	6.3*7.7	75	8*10.5	70
47			6.3*5.8	50	6.3*7.7	75	6.3*7.7	75	8*10.5	70
68	6.3*5.8	50	6.3*7.7	75	6.3*7.7	75	8*10.5	130	10*10.5	100
100	6.3*7.7	75	6.3*7.7	75	8*10.5	130	10*10.5	180	12.5*13.5	180
220	8*10.5	130	8*10.5	130	10*10.5	180	12.5*13.5	480	12.5*16	210
330	8*10.5	130	10*10.5	180	12.5*13.5	480	16*16.5	650	16*16.5	330
470	10*10.5	180	12.5*13.5	480	12.5*13.5	480	16*16.5	650	16*16.5	330
680	12.5*13.5	480	12.5*13.5	480			16*16.5	650	18*16.5	440
1000	12.5*16	585	12.5*16	585			18*16.5	855		
1500	12.5*16	585	16*16.5	650						
2200	16*16.5	650	18*16.5	855						
3300	18*16.5	855								
4700	18*16.5	855								

U <sub>R</sub> (V) C <sub>R</sub> (μF)	63V	
	ΦDxL mm*mm	I <sub>ACR</sub> 120Hz 125°C mA
10	6.3*7.7	33
22	8*10.5	60
33	10*10.5	80
47	10*10.5	80
68	10*10.5	80
100	12.5*13.5	165
220	16*16.5	310
330	16*16.5	310
470	18*16.5	405

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

Frequency (Hz)	50	120	300	1K	10K~100
Coefficient (kf)	0.70	1.00	1.17	1.36	1.50