VX

特点 Features

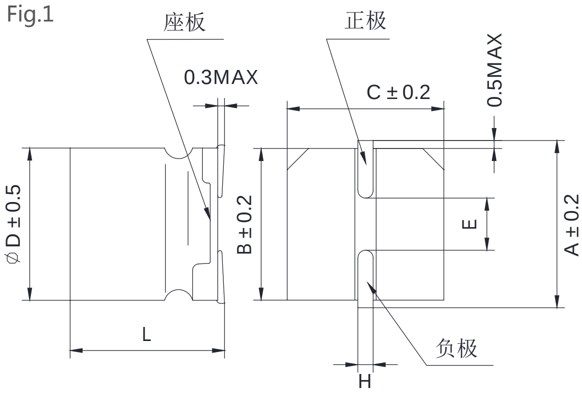
- 保证105℃ 7000~15000小时。Endurance 7000~15000h at 105℃.
- 额定电压范围：6.3~50V。Rated Voltage Range:6.3~50V.
- 低阻抗、超长寿命品。Low ESR , Super Long life Type.
- 满足RoHS。RoHS Compliant.

主要技术性能 Specifications

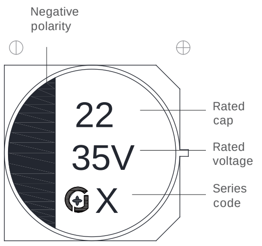
<table>
<tr><th>项目 Items</th><th colspan="3">特性 Performance Characteristics</th></tr>
<tr><td>类别温度范围
Category Temperature Range</td><td colspan="3">-25℃ ~+105℃</td></tr>
<tr><td>额定电压范围
Rated Voltage(UR)</td><td colspan="3">6.3 ~ 50V</td></tr>
<tr><td>标称电容量范围
Nominal Capacitance Range(C_R)</td><td colspan="2">10 ~2200μF</td><td>120Hz，+20℃</td></tr>
<tr><td>标称电容量允许偏差
Allowed Capacitance Tolerance(C_T)</td><td colspan="2">±20%(M)</td><td>120Hz，+20℃</td></tr>
<tr><td>漏电流
Leakage Current(I_L)</td><td colspan="2">≤0.01$C_R U_R$或者3μA
取较大值 (Whichever is greater)</td><td>+20℃
after 2 minutes</td></tr>
<tr><td>损耗角正切值
Tangent of loss angle(Tanδ)</td><td colspan="2"><table><tr><td>U_R(V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>Tanδ</td><td>0.32</td><td>0.28</td><td>0.26</td><td>0.16</td><td>0.14</td><td>0.14</td></tr></table></td><td>Max.
120Hz,+20℃</td></tr>
<tr><td>低温特性
Characteristics at Low Temperature</td><td colspan="2"><table><tr><td>U_R (V)</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>35</td><td>50</td></tr><tr><td>$Z_{-10℃}$ / $Z_{+20℃}$</td><td>4</td><td>3</td><td>2</td><td>2</td><td>2</td><td>2</td></tr></table></td><td>Max.
120Hz</td></tr>
<tr><td rowspan="5">耐久性
Load Life</td><td colspan="3">+105℃，连续施加额定电压7000~15000小时，恢复16小时后：
After applying rated voltage for 7000~15000 hours at 105℃ and then recovery 16 hours:</td></tr>
<tr><td>规定时间
Specified time</td><td colspan="2">Φ5-Φ6.3:7000小时 Φ8~Φ12.5:10000小时
Φ16~Φ18: 15000小时</td></tr>
<tr><td>电容量变化率
Capacitance change</td><td colspan="2">±30%初始值以内
Within ±30% of initial value</td></tr>
<tr><td>损耗角正切值
Tanδ</td><td colspan="2">≤ 300%初始规定值
Not more than 300% of specified value</td></tr>
<tr><td>漏电流
Leakage current</td><td colspan="2">≤ 初始规定值
Not more than specified value</td></tr>
<tr><td rowspan="4">高温贮存
Shelf Life</td><td colspan="3">+105℃,1000小时贮存后,恢复16小时后：
After storage for 1000 hours at +105℃ and then recovery 16 hours:</td></tr>
<tr><td>电容量变化率
Capacitance change</td><td colspan="2">±30%初始值以内
Within ±30% of initial value</td></tr>
<tr><td>损耗角正切值
Tanδ</td><td colspan="2">≤ 300%初始规定值
Not more than 300% of specified value</td></tr>
<tr><td>漏电流
Leakage current</td><td colspan="2">≤ 初始规定值
Not more than specified value</td></tr>
<tr><td rowspan="4">耐焊接热
Resistance to Soldering Heat</td><td colspan="3">在250℃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℃ for 30 seconds. After removing from the hot plate and restored at room temperature, they meet the following requirement.</td></tr>
<tr><td>电容量变化率
Capacitance change</td><td colspan="2">±10%初始值以内
Within ±10% of initial value</td></tr>
<tr><td>损耗角正切值
Tanδ</td><td colspan="2">≤初始规定值
Not more than specified value</td></tr>
<tr><td>漏电流
Leakage current</td><td colspan="2">≤ 初始规定值
Not more than specified value</td></tr>
</table>

尺寸图 Dimensional drawings

Fig.1



Marking
ΦD=5mm



ΦD=6.3~10.2mm

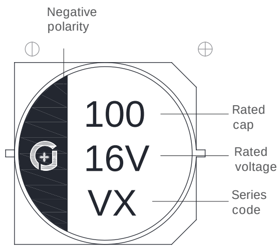
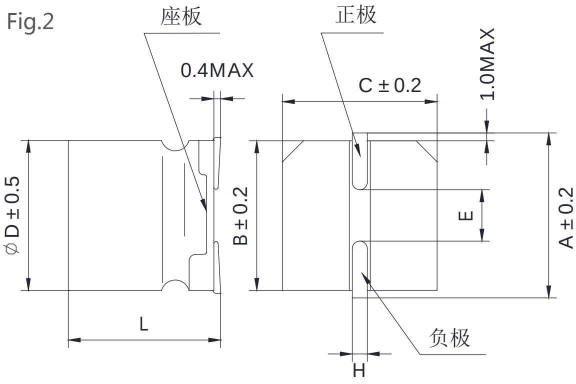
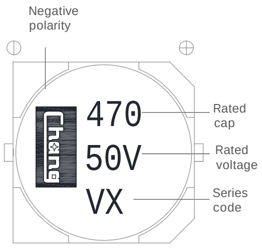


Fig.2



ΦD=12.5～18mm



尺寸表 Size table

单位 Unit: mm

ΦD	L	A	B	C	E±0.2	H	Fig.No.
5	7.0±0.3	6.0	5.3	5.3	1.3	0.5～0.8	1
6.3	7.0±0.3	7.3	6.6	6.6	2.2		
6.3	8.7±0.3	7.3	6.6	6.6	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_R(V) / C_R(μF)	6.3V			10V			16V			25V			35V			50V		
	ΦDxL mm*mm	$I_{AC,R}$ 100KHz 105℃ mA	ESR_{max} 100KHz 25℃ Ω	ΦDxL mm*mm	$I_{AC,R}$ 100KHz 105℃ mA	ESR_{max} 100KHz 25℃ Ω	ΦDxL mm*mm	$I_{AC,R}$ 100KHz 105℃ mA	ESR_{max} 100KHz 25℃ Ω	ΦDxL mm*mm	$I_{AC,R}$ 100KHz 105℃ mA	ESR_{max} 100KHz 25℃ Ω	ΦDxL mm*mm	$I_{AC,R}$ 100KHz 105℃ mA	ESR_{max} 100KHz 25℃ Ω	ΦDxL mm*mm	$I_{AC,R}$ 100KHz 105℃ mA	ESR_{max} 100KHz 25℃ Ω
10													5*7.0	95	2.2			
22							5*7.0	95	2.2	5*7.0	95	2.2	6.3*7.0	140	1.1			
33				5*7.0	95	2.2							6.3*8.7	230	1.0			
47	5*7.0	95	2.2				6.3*7.0	140	1.1	6.3*7.0	140	1.1				8*10.5	350	0.53
100	6.3*7.0	140	1.1							6.3*8.7	230	1.0	8*10.5	600	0.22	10*10.5	670	0.35
150				6.3*7.0	140	1.1										12.5*13.5	850	0.25
220				6.3*8.7	230	1.0	6.3*8.7	230	1.0	8*10.5	600	0.22	10*10.5	850	0.16	16*16.5	1090	0.20
330	6.3*8.7	230	1.0	8*10.5	600	0.22	8*10.5	600	0.22	10*10.5	850	0.16	12.5*13.5	1090	0.10	18*16.5	1190	0.15
470	8*10.5	600	0.22				10*10.5	850	0.16	12.5*13.5	1090	0.10	16*16.5	1500	0.08			
560				10*10.5	850	0.16	12.5*13.5	1090	0.10	16*16.5	1500	0.08	18*16.5	1800	0.06			
680	10*10.5	850	0.16				16*16.5	1500	0.08	18*16.5	1800	0.06						
820				12.5*13.5	1090	0.10	18*16.5	1800	0.06									
1000	12.5*13.5	1090	0.10															
1200				16*16.5	1500	0.08												
1500	16*16.5	1500	0.08	18*16.5	1800	0.06												
2200	18*16.5	1800	0.06															

额定纹波电流频率修正系数
Frequency correction factor for ripple current

Frequency(Hz) / C_R (μF)	120	1K	10K	100K
10-150	0.40	0.75	0.90	1.00
220-2200	0.50	0.85	0.94	1.00