



特点 Features

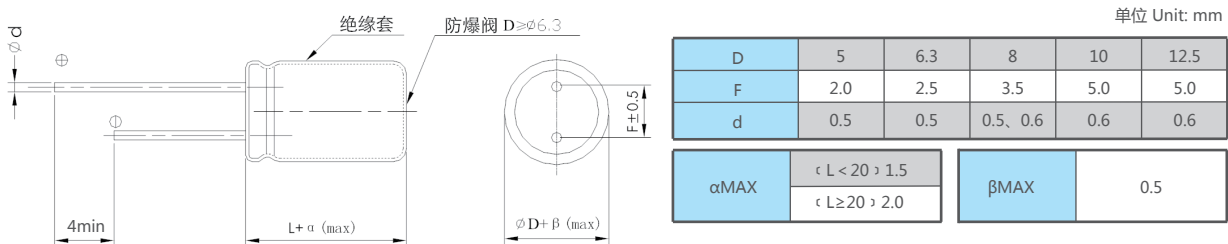
- 保证105°C 12000~20000小时。Endurance :12000~20000h at 105°C.
- 额定电压范围：160~450V。Rated Voltage Range: 160~450V.
- 低阻,耐高纹波,超长寿命。Low ESR, High ripple current, Ultra Long life.
- 满足RoHS。RoHS Compliant.



主要技术性能 Specifications

项目 Items	特性 Performance Characteristics															
类别温度范围 Category Temperature Range	-40~+105°C															
额定电压范围 Rated Voltage(U _R)	160~450V															
标称电容范围 Nominal Capacitance Range(C _R)	1~150μF	120Hz, +20°C														
标称电容允许偏差 Allowed Capacitance Tolerance(C _r)	±20%(M)	120Hz, +20°C														
漏电流 Leakage Current(I _L)	≤0.02C _R U _R +10μA	+20°C after 2 minutes														
损耗角正切值 Tangent of loss angle(Tanδ)	<table border="1"> <tr> <td>U_R (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Tanδ</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> <td>0.24</td> </tr> </table> <p>当容量大于1000μF时,每增加1000μF,其损耗角正切值增加0.02 When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.</p>	U _R (V)	160	200	250	350	400	450	Tanδ	0.24	0.24	0.24	0.24	0.24	0.24	Max. 120Hz, +20°C
U _R (V)	160	200	250	350	400	450										
Tanδ	0.24	0.24	0.24	0.24	0.24	0.24										
低温特性 Characteristics at low temperature	<table border="1"> <tr> <td>U_R (V)</td> <td>160</td> <td>200</td> <td>250</td> <td>350</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z_{-40°C} / Z_{+20°C}</td> <td>6</td> <td>6</td> <td>6</td> <td>7</td> <td>7</td> <td>9</td> </tr> </table>	U _R (V)	160	200	250	350	400	450	Z _{-40°C} / Z _{+20°C}	6	6	6	7	7	9	Max. 120Hz
U _R (V)	160	200	250	350	400	450										
Z _{-40°C} / Z _{+20°C}	6	6	6	7	7	9										
耐久性 Load life	<p>+105°C, 不超过额定电压的范围内叠加额定纹波电流,连续施加表中规定额定电压时间,恢复16小时后: Overlay the rated ripple current within the range of rated voltage, continuously apply the rated voltage specified in the table for a time +105 °C, and recover for 16 hours ;</p> <p>电容量变化率Capacitance change : ±30%初始测量值以内 within ±30% of initial value 损耗角正切值 Tanδ : ≤3倍初始规定值 Not more than 300% of specified value 漏电流 Leakage current : ≤初始规定值 Not more than specified value</p> <table border="1"> <tr> <td rowspan="3">160~450 (V)</td> <td>6.3×9, 6.3×11, 8×9, 10×9</td> <td>12,000 hours</td> </tr> <tr> <td>8×11.5, 8×16, 8×20, 10×12.5</td> <td>15,000 hours</td> </tr> <tr> <td>Φ≥10×16</td> <td>20,000 hours</td> </tr> </table>		160~450 (V)	6.3×9, 6.3×11, 8×9, 10×9	12,000 hours	8×11.5, 8×16, 8×20, 10×12.5	15,000 hours	Φ≥10×16	20,000 hours							
160~450 (V)	6.3×9, 6.3×11, 8×9, 10×9	12,000 hours														
	8×11.5, 8×16, 8×20, 10×12.5	15,000 hours														
	Φ≥10×16	20,000 hours														
高温贮存 Shelflife	<p>+105°C,1000小时贮存后,恢复16小时后: After storage for 1000 hours at +105°C and then recovery 16 hours:</p> <p>电容量变化率Capacitance change : ±20%初始测量值以内 within ±20% of initial value 损耗角正切值 Tanδ : ≤2倍初始规定值 Not more than 200% of specified value 漏电流 Leakage current : ≤2倍初始规定值 Not more than 200% of specified value</p>															

尺寸图 Dimension drawings



允许纹波电流的修正系数 Coefficient of Allowable Ripple Current

Frequency (Hz)	50	120	1K	10K	100K
Kf	0.40	0.50	0.80	0.90	1.00

规格特性表
Table of specifications and characteristics

C _r (μF)	U _r (V)	160			200			250		
		ΦD×L mm*mm	ESR _{max} 100KHz 25°C Ω	I _{ACmax} 100KHz 105°C mA	ΦD×L mm*mm	ESR _{max} 100KHz 25°C Ω	I _{ACmax} 100KHz 105°C mA	ΦD×L mm*mm	ESR _{max} 100KHz 25°C Ω	I _{ACmax} 100KHz 105°C mA
1		6.3×9	18.5	50	6.3×9	17.4	52	6.3×9	22.0	54
1.5		6.3×9	13.9	60	6.3×9	17.4	62	6.3×9	22.0	65
1.8		6.3×9	13.9	65	6.3×9	13.9	68	6.3×11	17.4	70
2.2		6.3×9	13.9	70	6.3×11	13.9	72	6.3×11	15.1	75
2.7		6.3×11	13.9	80	6.3×11	11.3	84	6.3×11	15.1	88
3.3		6.3×11	11.3	85	6.3×11	11.3	90	6.3×11	15.1	92
4.7		6.3×11	11.3	105	6.3×11	11.3	110	6.3×11	11.8	120
5.6		6.3×11	11.3	110	8×9	7.98	115	8×9	9.89	130
6.8		6.3×11	11.3	125	8×9	7.98	130	8×9	9.89	160
8.2		8×9	11.3	135	8×9	7.98	145	8×9	9.89	175
10		8×9	7.5	150	8×11.5	3.65	160	8×11.5	9.89	200
15		8×11.5	4.27	190	8×16	3.65	230	10×12.5	8.92	270
		10×9	4.27	210	10×12.5	3.65	280			
22		10×12.5	2.25	250	10×16	3.24	340	10×16	4.65	380
33		10×16	1.87	415	10×20	2.38	550	10×20	4.65	570
47		10×20	1.87	525	12.5×20	1.38	710	12.5×20	4.65	795

C _r (μF)	U _r (V)	350			400			450		
		ΦD×L mm*mm	ESR _{max} 100KHz 25°C Ω	I _{ACmax} 100KHz 105°C mA	ΦD×L mm*mm	ESR _{max} 100KHz 25°C Ω	I _{ACmax} 100KHz 105°C mA	ΦD×L mm*mm	ESR _{max} 100KHz 25°C Ω	I _{ACmax} 100KHz 105°C mA
1.0		6.3×9	33.0	50	6.3×11	38.0	54	6.3×11	38.0	58
1.2		6.3×11	33.0	55	8×9	38.0	60	8×11.5	38.0	65
1.5		6.3×11	33.0	63	8×9	38.0	66	8×11.5	38.0	70
1.8		6.3×11	33.0	70	8×9	33.0	75	8×11.5	38.0	80
2.2		8×9	33.0	77	8×9	33.0	78	8×11.5	33.0	88
		8×11.5	33.0	80	8×11.5	33.0	82			
2.7		8×11.5	33.0	85	8×11.5	33.0	88	8×16	33.0	100
3.3		8×11.5	21.0	100	8×11.5	21.0	100	8×16	33.0	110
		10×9	21.0	115	10×9	21.0	120			
4.7		10×9	21.0	120	10×12.5	14.0	126	10×12.5	18.4	145
5.6		8×16	21.0	135	8×20	14.0	155	10×16	18.4	180
					10×12.5	14.0	158			
6.8		10×12.5	16.2	165	8×20	10.2	170	10×16	12.0	200
					10×16	10.2	180			
8.2		10×16	13.5	180	10×16	10.2	190	10×20	12.0	235
10		10×16	13.5	215	10×16	9.50	220	10×20	6.50	285
15		10×20	9.50	295	12.5×20	4.30	300			