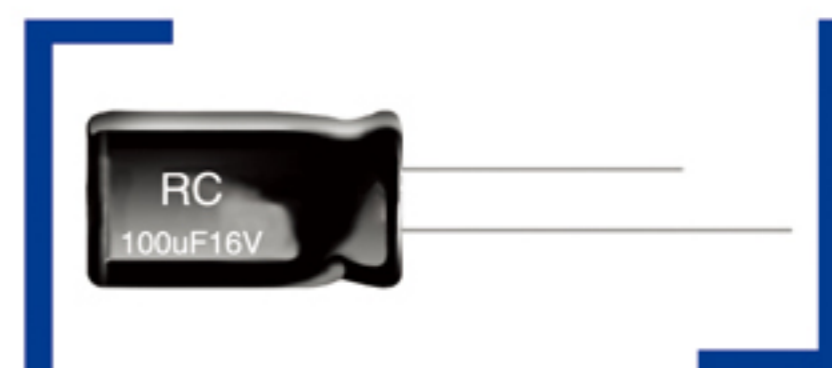


RC 长寿命, 宽温度品

- ◎ 宽温度, 105℃, 4000~10000小时。
Wide temperature range, 105℃, long life: 4000~10000 hours.
- ◎ ROHS指令已对应完毕。
Adapted to the ROHS directive.

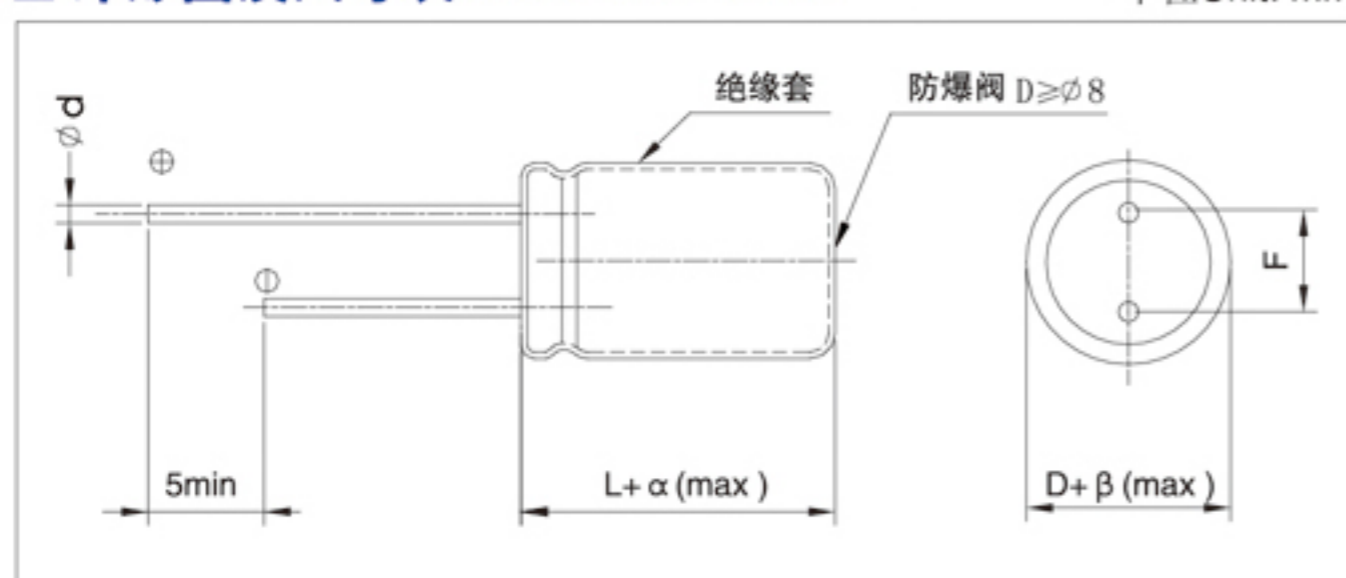


主要技术性能 Specifications

项目 Item	特性 Performance Characteristics																								
使用温度范围 Operating temperature range	-40 ~ +105℃																								
额定电压范围 Rated voltage range	6.3 ~ 63V																								
标称容量范围 Nominal capacitance range	2.2~18000 μ F																								
标称容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20℃)																								
漏电流 Leakage current	$I \leq 0.01CV$ (μ A) 或 $3 \mu A$ 2分钟 取较大者 (at 20℃, after 2 minutes) (Whichever is greater)																								
损耗角正切值 (tg δ) Dissipation factor(+20℃, 120Hz)	<table border="1"> <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> <td>63</td> </tr> <tr> <td>tg δ</td> <td>0.22</td> <td>0.19</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> </tr> </table> <p>容量大于1000μF者, 每增加1000μF, 其损耗角正切值增加0.02 When nominal capacitance exceeds 1000 μ F, add 0.02 to the value above for each 1000 μ F increase.</p>	U _R (V)	6.3	10	16	25	35	50	63	tg δ	0.22	0.19	0.16	0.14	0.12	0.12	0.10								
U _R (V)	6.3	10	16	25	35	50	63																		
tg δ	0.22	0.19	0.16	0.14	0.12	0.12	0.10																		
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	<table border="1"> <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> <td>63</td> </tr> <tr> <td>Z-25℃ / Z+20℃</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> <tr> <td>Z-40℃ / Z+20℃</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> </tr> </table>	U _R (V)	6.3	10	16	25	35	50	63	Z-25℃ / Z+20℃	3	3	3	3	3	3	3	Z-40℃ / Z+20℃	3	3	3	3	3	3	3
U _R (V)	6.3	10	16	25	35	50	63																		
Z-25℃ / Z+20℃	3	3	3	3	3	3	3																		
Z-40℃ / Z+20℃	3	3	3	3	3	3	3																		
耐久性 Load life	<table border="1"> <tr> <td>ΦD</td> <td>Φ5,6.3</td> <td>Φ8,10</td> <td>≥ Φ12.5</td> </tr> <tr> <td>6.3~10(V)</td> <td>4,000 hours</td> <td>6,000 hours</td> <td>8,000 hours</td> </tr> <tr> <td>16~100(V)</td> <td>5,000 hours</td> <td>7,000 hours</td> <td>10,000 hours</td> </tr> </table> <p>+105℃加额定电压4000~10000小时, 恢复16小时后: After applying rated voltage for 4000~10000 hours at +105℃ and then resumed for 16 hours: 电容量变化率 Capacitance change : ± 25%初始测量值以内 ± 25% of the initial measured value 漏电流 Leakage current : ≤ 初始规定值 ≤ The initial specified value 损耗角正切值 Dissipation factor : ≤ 2倍初始规定值 ≤ 2times of the initial specified value</p>	ΦD	Φ5,6.3	Φ8,10	≥ Φ12.5	6.3~10(V)	4,000 hours	6,000 hours	8,000 hours	16~100(V)	5,000 hours	7,000 hours	10,000 hours												
ΦD	Φ5,6.3	Φ8,10	≥ Φ12.5																						
6.3~10(V)	4,000 hours	6,000 hours	8,000 hours																						
16~100(V)	5,000 hours	7,000 hours	10,000 hours																						
高温贮存 Shelf life	<p>+105℃, 1000小时贮存后, 恢复16小时后: After storage for 1000 hours at +105℃ and then resumed 16 hours: 电容量变化率 Capacitance change : ± 25%初始测量值以内 ± 25% of the initial measured value 漏电流 Leakage current : ≤ 2倍初始规定值 ≤ 2times of the initial specified value 损耗角正切值 Dissipation factor : ≤ 2倍初始规定值 ≤ 2times of the initial specified value</p>																								

外形图及尺寸表 Case size table

单位Unit: mm



D	5	6.3	8	10	12.5	16~18
F	2.0	2.5	3.5	5.0	5.0	7.5
d	0.5		0.5、0.6		0.6	0.8

α MAX	(L < 20) 1.5	β MAX	(D < 20) 0.5
	(L ≥ 20) 2.0		(D ≥ 20) 1.0

频率修正系数 Frequency coefficient

Freq.(Hz) CAP (μF)	120	1K	10K	≥ 100K
Below 4.7	0.42	0.70	0.80	1.00
5.6~33	0.50	0.73	0.90	1.00
34~330	0.55	0.77	0.95	1.00
331~1000	0.60	0.80	0.96	1.00
1200 Above	0.70	0.85	0.98	1.00

尺寸 Dimensions

CAP(μF)	WV	6.3V(0J)			10V(1A)			16V(1C)			25V(1E)		
		Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple
47	470										5×11	0.67	150
56	560							5×11	0.58	150			
100	101	5×11	0.59	200	5×11	0.58	210				6.3×11	0.35	280
120	121							6.3×11	0.22	340			
150	151	5×11	0.58	210									
220	221				6.3×11	0.25	340				8×11.5	0.20	480
330	331	6.3×11	0.25	340				8×11.5	0.20	520	10×12.5	0.11	760
470	471				8×11.5	0.18	460	10×12.5	0.18	760	10×16	0.10	1250
								6.3×15	0.18	540	10×20	0.09	1400
680	681	8×11.5	0.11	640	8×16	0.11	680	10×16	0.08	1250	10×16	0.09	1250
											10×20	0.08	1400
820	821	10×12.5	0.08	865							10×20	0.072	1400
1000	102	8×16	0.087	840	8×20	0.083	1150	10×20	0.078	1400	10×20	0.068	1400
					10×16	0.085	1250				12.5×15	0.07	1450
1200	122	10×16	0.060	1210	10×20	0.046	1400	10×25	0.05	1540			
1500	152	10×20	0.046	1400	10×25	0.042	1650	12.5×20	0.045	1820	12.5×25	0.040	2060
2200	222	10×25	0.042	1650	10×30	0.036	1800	12.5×25	0.034	1960	16×25	0.032	2540
3300	332	12.5×20	0.035	1900	12.5×25	0.030	2230	12.5×35	0.029	2500	18×25	0.027	3140
3900	392	12.5×25	0.030	2230	12.5×30	0.028	2650	16×25	0.025	2630	18×30	0.025	3400
4700	472	12.5×30	0.027	2650	12.5×35	0.025	2880	16×30	0.024	3100	18×35	0.023	3900
6800	682	16×25	0.024	2930	18×25	0.023	3140	16×40	0.022	3800			
8200	822	16×30	0.023	3450	18×30	0.021	4170	18×35	0.020	3950			
10000	103	16×35	0.021	3610	18×35	0.020	4220	18×40	0.019	4000			
15000	153	18×35	0.020	4220									
18000	183	18×40	0.018	4280									

CAP(μF)	WV	35V(1V)			50V(1H)			63V(1J)		
		Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple
2.2	2R2				5×11	3.5	43			
3.3	3R3				5×11	3.2	53			
4.7	4R7				5×11	3.1	78			
6.8	6R8				5×11	3.0	82			
10	100				5×11	2.0	98			
22	220	5×11	1.5	110	5×11	1.5	110			
33	330	5×11	1.2	125	6.3×11	1.0	158	6.3×11	0.55	180
56	560	6.3×11	0.50	210				8×11.5	0.42	350
82	820							10×12.5	0.20	820
100	101				8×11.5	0.29	500			
120	121				8×16	0.15	530	10×16	0.18	1200
150	151	8×11.5	0.28	380	10×12.5	0.16	820			
220	221	10×12.5	0.16	650	10×16	0.11	1200	10×25	0.09	1540
270	271	8×20	0.15	1150	10×20	0.078	1400	12.5×20	0.83	1820
330	331	10×16	0.14	1200	10×25	0.072	1540	12.5×25	0.079	1950
470	471	8×20	0.13	1180	12.5×20	0.063	1820	12.5×30	0.065	2150
		10×20	0.12	1400						
680	681	12.5×20	0.072	1820	12.5×30	0.058	2150	16×25	0.062	2600
820	821				12.5×35	0.050	2230	18×25	0.050	2800
1000	102	12.5×25	0.060	1950	16×25	0.048	2400	16×35	0.042	2900
1200	122	12.5×30	0.055	2650	18×25	0.040	2680	16×40	0.038	3400
1500	152	12.5×35	0.042	2880	16×35	0.035	2900	18×35	0.030	3400
2200	222	16×30	0.031	3000	18×35	0.030	3680	18×40	0.027	3500
3300	332	16×40	0.026	3200						

Size φ D × L (mm)
 Maximum Allowable Ripple Current (mA rms) at 105°C 100KHz
 Maximum ESR (Ω) at 20°C 100KHz