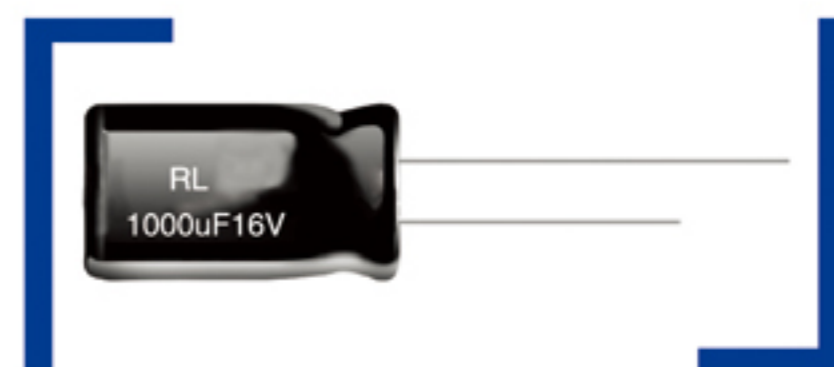


RL 长寿命，宽温度品

- ◎ 宽温度，105℃，2000小时长寿命，体积小。
Wide temperature range, 105℃, long life: 2000 hours. Miniature.
- ◎ 适用于彩电、空调、电子电表等线路中。
Used in color-TV, air conditioning electron meter circuits etc.
- ◎ ROHS指令已对应完毕。Adapted to the ROHS directive.



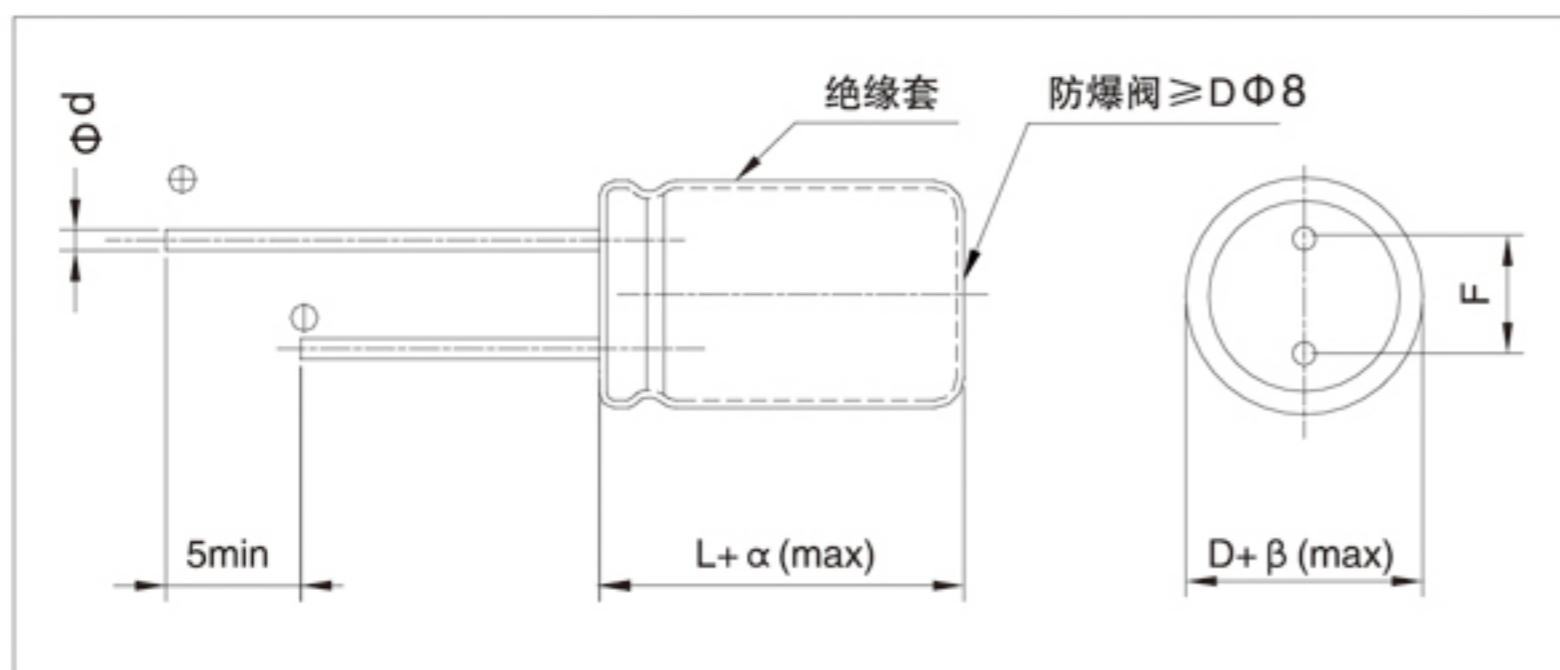
主要技术性能 Specifications

项目 Item	特性 Performance Characteristics																																					
使用温度范围 Operating temperature range	-40 ~ +105℃	-25 ~ +105℃																																				
额定电压范围 Rated voltage range	6.3 ~ 100V	160 ~ 450V																																				
标称电容量范围 Nominal capacitance range	0.1~33000 μ F																																					
标称电容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20℃)																																					
漏电流 Leakage current	$I \leq 0.01CV (\mu A)$ 或 $3 \mu A$ 2分钟 取较大者 (at 20℃, after 2 minute) (Whichever is greater)	$I \leq 0.03CV (\mu A) + 40 \mu A$ 2分钟(2minute)																																				
损耗角正切值 (tg δ) Dissipation factor (+20℃, 120Hz)	<table border="1"> <tr> <td>UR(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</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>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </table> <table border="1"> <tr> <td>UR(V)</td> <td>160</td> <td>200</td> <td>250</td> <td>400</td> <td>450</td> </tr> <tr> <td>tg δ</td> <td>0.15</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td>0.20</td> </tr> </table> <p>容量大于1000 μ F者，每增加1000 μ F，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>		UR(V)	6.3	10	16	25	35	50	63	100	tg δ	0.22	0.19	0.16	0.14	0.12	0.10	0.09	0.08	UR(V)	160	200	250	400	450	tg δ	0.15	0.15	0.15	0.20	0.20						
UR(V)	6.3	10	16	25	35	50	63	100																														
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温度特性 Temperature characteristics (Impedance ratio at 120Hz)	<table border="1"> <tr> <td>UR(V)</td> <td>6.3</td> <td>10</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>160~250</td> <td>400</td> <td>450</td> </tr> <tr> <td>Z-25℃ / Z+20℃</td> <td>4</td> <td>3</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>4</td> <td>6</td> <td>7</td> </tr> <tr> <td>Z-40℃ / Z+20℃</td> <td>8</td> <td>6</td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>—</td> <td>—</td> <td>—</td> </tr> </table>		UR(V)	6.3	10	16	25	35	50	63	100	160~250	400	450	Z-25℃ / Z+20℃	4	3	2	2	2	2	2	2	4	6	7	Z-40℃ / Z+20℃	8	6	4	3	3	3	3	3	—	—	—
UR(V)	6.3	10	16	25	35	50	63	100	160~250	400	450																											
Z-25℃ / Z+20℃	4	3	2	2	2	2	2	2	4	6	7																											
Z-40℃ / Z+20℃	8	6	4	3	3	3	3	3	—	—	—																											
耐久性 Load life	+105℃ 加额定电压 2000 小时, 恢复 16 小时后: After applying rated voltage for 2000 hours, at +105℃ and then resumed 16 hours: 电容量变化率 Capacitance change : ±20%初始测量值以内 ±20% 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																																					
高温贮存 Shelf life	+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 : ±20%初始测量值以内 ±20% 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																																					

Standard

外形图及尺寸表 Case size table

单位Unit: mm



D	5	6.3	8	10~12.5	16~18	22
F	2.0	2.5	3.5	5.0	7.5	10
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

Rated Voltage(V)	Freq.(Hz)		50	120	300	1K	10K	100K
	CAP(μF)							
6.3~100	~47		0.75	1.00	1.35	1.57	2.00	2.30
	100~470		0.80	1.00	1.23	1.34	1.50	1.65
	≥560		0.85	1.00	1.10	1.13	1.15	1.40
160~450	0.47~4.7		0.65	1.00	1.35	1.75	2.30	2.50
	6.8~82		0.75	1.00	1.25	1.50	1.75	1.80
	100~1000		0.80	1.00	1.15	1.30	1.40	1.50

尺寸 Dimensions

WV CAP(μF)		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)	
		Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1	0R1											5 × 11	1
0.22	R22											5 × 11	3
0.33	R33											5 × 11	4
0.47	R47											5 × 11	7
1	010											5 × 11	13
2.2	2R2									5 × 11	25	5 × 11	20
3.3	3R3											5 × 11	35
4.7	4R7					5 × 11	40	5 × 11	40	5 × 11	30	5 × 11	40
10	100					5 × 11	50	5 × 11	50	5 × 11	45	5 × 11	55
22	220			5 × 11	50	5 × 11	55	5 × 11	65	5 × 11	65	5 × 11	80
33	330	5 × 11	55	5 × 11	65	5 × 11	65	5 × 11	85	5 × 11	85	5 × 11	100
												6.3 × 11	130
47	470	5 × 11	70	5 × 11	75	5 × 11	80	5 × 11	100	6.3 × 11	105	6.3 × 11	135
100	101	5 × 11	100	5 × 11	105	5 × 11	125	6.3 × 11	160	6.3 × 11	170	8 × 11.5	230
						6.3 × 11	180			8 × 11.5	205		
220	221	5 × 11	155	6.3 × 11	170	6.3 × 11	215	8 × 11.5	285	8 × 11.5	295	10 × 16	510
						8 × 11.5	280			10 × 12.5	360		
330	331	6.3 × 11	215	6.3 × 11	240	8 × 11.5	315	8 × 11.5	340	10 × 12.5	420	10 × 16	590
				8 × 11.5	320			10 × 12.5	420	10 × 16	500		
470	471	6.3 × 11	260	6.3 × 11	285	8 × 11.5	365	10 × 12.5	470	10 × 16	545	10 × 20	705
				8 × 11.5	340	10 × 12.5	440	10 × 16	520	10 × 20	590		
680	681	8 × 11.5	365	8 × 11.5	410	10 × 12.5	480	10 × 16	620	10 × 20	680	12.5 × 20	925
1000	102	8 × 11.5	445	10 × 12.5	570	10 × 16	680	10 × 20	820	12.5 × 20	1025	12.5 × 25	1285
				10 × 16	620	10 × 20	720	12.5 × 20	920	12.5 × 25	1150		
2200	222	10 × 16	740	10 × 20	900	12.5 × 20	1110	12.5 × 25	1175	16 × 25	1500	16 × 35	1885
				12.5 × 20	950	12.5 × 25	1250			16 × 30	1730		
3300	332	10 × 20	1030	12.5 × 20	1205	12.5 × 25	1390	16 × 25	1645	18 × 25	1820	18 × 35	2165
						16 × 25	1530	16 × 30	1800	16 × 30	1810		
4700	472	12.5 × 20	1280	12.5 × 25	1490	16 × 25	1740	16 × 30	2010	18 × 35	2335		
6800	682	12.5 × 25	1555	16 × 25	1825	16 × 30	2080	16 × 35	2308	18 × 40	2400		
10000	103	16 × 25	1900	16 × 30	1980	16 × 35	2380	18 × 35	2500				
22000	223	18 × 35	2400	18 × 40	2410								
33000	333	18 × 40	2555										

尺寸 Dimensions

CAP(μF)		WV	63V(1J)		100V(2A)		160V(2C)		200V(2D)		220V(2P)	
			Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
0.1	0R1		5 × 11	2								
1	010		5 × 11	15	5 × 11	15						
2.2	2R2				5 × 11	25						
3.3	3R3				5 × 11	35			6.3 × 11	35	6.3 × 11	35
4.7	4R7		5 × 11	40	5 × 11	40	6.3 × 11	51	6.3 × 11	53	6.3 × 11	53
10	100		5 × 11	60	6.3 × 11	85	8 × 11.5	91	8 × 11.5	91	8 × 11.5	91
22	220		5 × 11	80	6.3 × 11	95	10 × 12.5	150	10 × 16	165	10 × 16	165
			6.3 × 11	90	8 × 11.5	150						
33	330		6.3 × 11	120	8 × 11.5	145	10 × 16	205	10 × 20	225	10 × 20	225
					10 × 12.5	260						
47	470		6.3 × 11	145	10 × 12.5	280	10 × 20	270	10 × 25	300	12.5 × 20	300
			8 × 11.5	155	10 × 16	280						
68	680		8 × 11.5	155	10 × 16	300	12.5 × 20	350	12.5 × 20	350	12.5 × 25	380
82	820						12.5 × 20	390	12.5 × 25	420	16 × 20	440
100	101		10 × 12.5	260	10 × 20	350	12.5 × 25	470	16 × 20	490	16 × 25	530
					12.5 × 20	470						
150	151						16 × 20	600	16 × 25	660	16 × 30	690
180	181						16 × 25	720	16 × 30	780	16 × 35	820
220	221		10 × 20	505	12.5 × 25	660	16 × 30	860	16 × 35	920	16 × 40	950
					16 × 25	960						
270	271						16 × 35	1020	16 × 40	1080	18 × 35	1100
330	331		12.5 × 20	690	12.5 × 25	800	16 × 40	1200	18 × 35	1200	18 × 40	1250
					16 × 25	1030						
390	391						18 × 35	1280	18 × 40	1350	18 × 45	1400
470	471		12.5 × 20	810	16 × 25	1050	18 × 40	1490	18 × 45	1570		
					16 × 30	1250						
560	561						18 × 45	1700				
680	681		12.5 × 25	1160	16 × 30	1290						
					16 × 35	1470						
1000	102		16 × 25	1450	18 × 40	2020						
2200	222		18 × 35	1785								

Standard

CAP(μF)		WV	250V(2E)		350V(2V)		400V(2G)		420V(2M)		450V(2W)	
			Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple	Size	Ripple
1	010		6.3 × 11	16	6.3 × 11	18	6.3 × 11	19	6.3 × 11	19	6.3 × 11	18
2.2	2R2		6.3 × 11	29	6.3 × 11	30	6.3 × 11	32	8 × 11.5	32	8 × 11.5	30
3.3	3R3		6.3 × 11	37	6.3 × 11	40	8 × 11.5	42	8 × 11.5	42	8 × 11.5	40
4.7	4R7		8 × 11.5	53	8 × 11.5	55	8 × 11.5	56	8 × 16	60	8 × 16	58
6.8	6R8		8 × 11.5	73	8 × 12	75	8 × 12	75	8 × 16	80	10 × 16	90
8.2	8R2		8 × 11.5	80	8*16	82	8*16	82	10 × 16	98	10 × 16	98
10	100		8 × 16	102	10 × 12.5	105	10 × 12.5	105	10 × 16	115	10 × 20	120
15	150		10 × 16	135	10 × 20	150	10 × 20	150	10 × 25	165	10 × 25	165
22	220		10 × 20	180	10 × 25	200	10 × 25	200	12.5 × 20	205	12.5 × 25	215
33	330		10 × 25	245	12.5 × 25	270	12.5 × 25	270	16 × 20	270	16 × 20	270
39	390		12.5 × 20	260	16 × 20	300	16 × 20	300	16 × 20	300	16 × 25	330
47	470		12.5 × 25	320	16 × 20	330	16 × 25	360	16 × 25	360	16 × 30	395
56	560		12.5 × 25	350	16 × 25	400	16 × 25	400	16 × 30	430	16 × 30	430
68	680		16 × 20	400	16 × 30	475	16 × 30	475	16 × 30	475	16 × 35	510
82	820		16 × 25	480	16 × 30	520	16 × 35	580	16 × 35	580	16 × 40	590
100	101		16 × 25	530	16 × 35	620	16 × 35	650	16 × 40	650	18 × 35	650
120	121		16 × 30	620	16 × 40	720	18 × 35	720	18 × 40	750	18 × 40	750
150	151		16 × 35	750	18 × 40	840	18 × 40	780	18 × 45	880	18 × 45	880
180	181		16 × 40	880	18 × 45	960	18 × 50	1000	22 × 40	1000	22 × 40	1000
220	221		18 × 40	1010	22 × 40	1100	22 × 45	1120				

Size φ D × L(mm)

Maximum Allowable Ripple Current (mA rms) at 105°C 120Hz