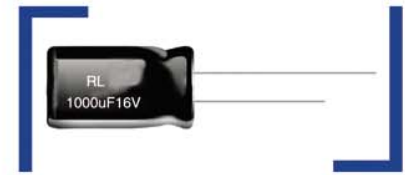


RL 长寿命, 宽温度品

- ◎ 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.

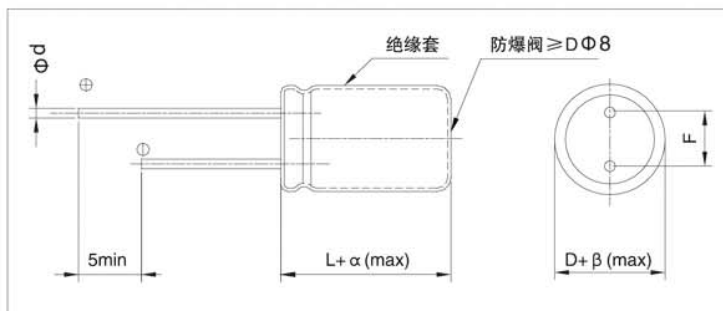


主要技术性能 Specifications

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					
标称电容容量范围 Nominal capacitance range	0.1~33000 μ F												
标称电容容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20℃)												
漏电流 Leakage current	I≤0.01CV (μ A)或3 μ A 2分钟 取较大者 (at 20℃,after 2 minute) (Whichever is greater)							I≤0.03CV (μ A)+40 μ A 2分钟(2minute)					
损耗角正切值 (tg δ) Dissipation factor (+20℃, 120 Hz)	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				
	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.												
温度特性 Temperature characteristics (Impedance ratio at 120Hz)	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												

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
	(L ≥ 20) 2.0

β MAX	(D < 20) 0.5
	(D ≥ 20) 1.0

频率修正系数 Frequency coefficient

Rated Voltage(V)	Freq.(Hz)	50	120	300	1K	10K	100K
6.3~100	CAP(μF)						
	~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
160~450	≥560	0.85	1.00	1.10	1.13	1.15	1.40
	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		6.3V(0J)		10V(1A)		16V(1C)		25V(1E)		35V(1V)		50V(1H)	
CAP(μF)		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
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
220	221	5 × 11	155	6.3 × 11	170	6.3 × 11	215	8 × 11.5	285	8 × 11.5	295	10 × 16	510
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
470	471	6.3 × 11	260	6.3 × 11	285	8 × 11.5	365	10 × 12.5	470	10 × 16	545	10 × 20	705
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
2200	222	10 × 16	740	10 × 20	900	12.5 × 20	1110	12.5 × 25	1175	16 × 25	1500	16 × 35	1885
3300	332	10 × 20	1030	12.5 × 20	1205	12.5 × 25	1390	16 × 25	1645	18 × 25	1820	18 × 35	2165
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℃ 120Hz

铝电解电容器产品编码体系表

Product symbol system for Aluminum Electrolytic Capacitors

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Series Code

填写品种一览表
的名称
Fill in Series
Code Of
Variety list

例:

Series	Code
CD110	GR
CD293	LP

Voltage (WV)

Voltage	Code
2.5	0E
2.7	0F
4	0G
6.3	0J
8	0K
10	1A
16	1C
25	1E
35	1V
40	1G
50	1H
63	1J
80	1K
100	2A
125	2B
160	2C
180	2Z
200	2D
220	2P
250	2E
315	2F
330	2U
350	2V
400	2G
420	2M
450	2W
500	2H

Capacitance (μF)

Cap (μF)	Code
0.1	0R1
0.22	R22
0.47	R47
1	010
2.2	2R2
4.7	4R7
10	100
22	220
47	470
100	101
220	221
470	471
680	681
1000	102
2200	222
4700	472
10000	103

Cap (F)	Code
0.5	504
1	105
4.7	475
10	106
47	476
100	107

Tolerance

Tolerance (%)	Code
+5	J
-5	J
+10	K
-10	K
+15	Y
-15	Y
+20	M
-20	M
+20	R
-0	R
+20	H
-5	H
+20	V
-10	V
+30	F
-0	F
+30	G
+10	G
+30	Q
-10	Q
+20	E
-15	E
-30	B
+20	B

Size Code

ΦD	Code
3	A
4	B
5	C
6	D
6.3	E
8	F
10	G
12	H
12.5	I
13	J
14	K
16	L
18	M
19	N
20	O
22	P
25.4	Q
30	R
35	S
40	T
50	U
51	V
63.5	W
76	X
89	Y
45	Z

L	Code
5	050
5.4	054
7	070
9	090
10	100
11	110
11.5	115
12	120
14	140
16	160
20	200
25	250
30	300
35	350
40	400
45	450
50	500
55	550
60	600
70	700
80	800
90	900
100	10A
105	10B
110	11A
115	11B
120	12A
130	13A
140	14A
150	15A
160	16A
200	20A
205	20B
210	21A
215	21B

Terminal Code

Brand	Code
Chang	C

Sleeve	Code
PVC	V
PET	E

Terminal Code

1. 引线式

产品形式	代码	产品形式	代码
H=7	Z70	H=16	Z16
H=7.5	Z75	H=17	Z17
H=7.7	Z77	J1H=4	J40
H=8	Z80	LHB=11	L11
H=9	Z90	MH=3.3	M33
H=3.2	Z32	散装	A00
H=10	Z10	编带 F=2.5	B25
H=11	Z11	编带 F=3.5	B35
H=12	Z12	编带 F=5.0	B50
H=15	Z15	...	...

2. 焊针式

焊针类别	代码	焊针长 L1	E 尺寸
二针不自锁	N68	6.8	11.8
二针自锁(长)	S68	6.8	12.5
二针自锁(短)	S55	5.5	12.25~12.40
二针卧式	W15	15	
	W16	16	
	W17	17	
四焊针(弯形)	C68	6.8	
四焊针(直形)	C90	9.0	
五焊针(弯形)	X68	6.8	
五焊针(直形)	X90	9.0	

3. 焊片式

焊片类别	代 码	焊片长 L1
垂直形	K68	6.8
	K52	5.2
U 形	U12	12

4. 螺栓式

螺栓	代 码	
	底部无螺柱	底部有螺柱
8	R08	D08
10	R10	D10
17.2	R17	D17

For example: CD110 16WV 2200 μ F 20% 12.5×25 taping F=5.0 Brand: Chang PVC Sleeve

G	R	1	C	2	2	2	M	I	2	5	0	B	5	0	C	V	0
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