

# LW

## 特点 Features

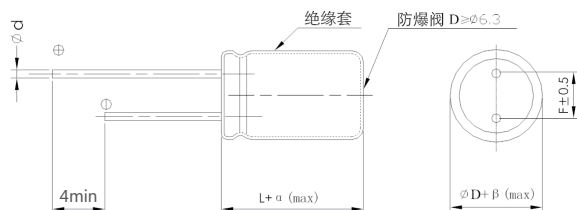
- 保证125°C 1000~4000小时。Endurance :1000~4000h at 125°C.
- 额定电压范围：16~400V。Rated Voltage Range: 16~400V.
- 超高温。Extremely high temperature.
- 满足RoHS。RoHS Compliant.



## 主要技术性能 Specifications

项目 Items	特性 Performance Characteristics																															
类别温度范围 Category Temperature Range	-55 ~ +125°C	-40 ~ +125°C																														
额定电压范围 Rated Voltage(U <sub>R</sub> )	16~100V	200~400V																														
标称电容范围 Nominal Capacitance Range(C <sub>R</sub> )	1~4700μF																															
标称电容允许偏差 Allowed Capacitance Tolerance(C <sub>r</sub> )	±20%(M)																															
漏电流 Leakage Current(I <sub>L</sub> )	≤0.01C <sub>R</sub> U <sub>R</sub> 或者3μA取较大值 ( Whichever is greater )	≤0.02 C <sub>R</sub> U <sub>R</sub> +10μA																														
损耗角正切值 Tangent of loss angle(Tanδ)	<table border="1"> <tr> <td>U<sub>R</sub> (V)</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>200</td> <td>250</td> <td>400</td> </tr> <tr> <td>Tanδ</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.12</td> <td>0.12</td> <td>0.15</td> <td>0.15</td> <td>0.20</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 <sub>R</sub> (V)	16	25	35	50	63	100	200	250	400	Tanδ	0.16	0.14	0.12	0.12	0.12	0.12	0.15	0.15	0.20	120Hz, +20°C  Max. 120Hz, +20°C										
U <sub>R</sub> (V)	16	25	35	50	63	100	200	250	400																							
Tanδ	0.16	0.14	0.12	0.12	0.12	0.12	0.15	0.15	0.20																							
低温特性 Characteristics at low temperature	<table border="1"> <tr> <td>U<sub>R</sub> (V)</td> <td>16</td> <td>25</td> <td>35</td> <td>50</td> <td>63</td> <td>100</td> <td>200</td> <td>250</td> <td>400</td> </tr> <tr> <td>Z<sub>-40°C</sub> / Z<sub>+20°C</sub></td> <td>4</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>3</td> <td>6</td> <td>6</td> <td>7</td> </tr> <tr> <td>Z<sub>-55°C</sub> / Z<sub>+20°C</sub></td> <td>8</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>6</td> <td>-</td> <td>-</td> <td>-</td> </tr> </table>	U <sub>R</sub> (V)	16	25	35	50	63	100	200	250	400	Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	4	3	3	3	3	3	6	6	7	Z <sub>-55°C</sub> / Z <sub>+20°C</sub>	8	6	6	6	6	6	-	-	-	Max. 120Hz
U <sub>R</sub> (V)	16	25	35	50	63	100	200	250	400																							
Z <sub>-40°C</sub> / Z <sub>+20°C</sub>	4	3	3	3	3	3	6	6	7																							
Z <sub>-55°C</sub> / Z <sub>+20°C</sub>	8	6	6	6	6	6	-	-	-																							
耐久性 Load life	<p>+125°C，不超过额定电压的范围下叠加额定纹波电流，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 +125 °C, and recover for 16 hours ; 电容变化率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>ΦD</td> <td>6.3</td> <td>8</td> <td>10</td> <td>≥12.5</td> </tr> <tr> <td>16~100 ( V )</td> <td>1000 hours</td> <td>2000 hours</td> <td>2000 hours</td> <td>4000 hours</td> </tr> <tr> <td>200~400 ( V )</td> <td>1000 hours</td> <td>2000 hours</td> <td>4000 hours</td> <td>4000 hours</td> </tr> </table>		ΦD	6.3	8	10	≥12.5	16~100 ( V )	1000 hours	2000 hours	2000 hours	4000 hours	200~400 ( V )	1000 hours	2000 hours	4000 hours	4000 hours															
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16~100 ( V )	1000 hours	2000 hours	2000 hours	4000 hours																												
200~400 ( V )	1000 hours	2000 hours	4000 hours	4000 hours																												
高温贮存 Shelf life	<p>+125°C,1000小时贮存后,恢复16小时后： After storage for 1000 hours at +125°C and then recovery 16 hours: 电容变化率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 : ≤3倍初始规定值 Not more than 300% of specified value</p>																															

## 尺寸图 Dimension drawings



单位 Unit: mm

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

αMAX	ε L < 20 > 1.5	βMAX	0.5
	ε L ≥ 20 > 2.0		

频率修正系数 Frequency Coefficient

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 <sub>R</sub> (μF)	U <sub>R</sub> (V)	16			25			35			50		
		ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>ACmax</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>ACmax</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>ACmax</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>ACmax</sub> 100KHz 125°C mA
1.0											8×11.5	2.5	36
1.5											8×11.5	2.5	42
1.8											8×11.5	2.5	48
2.2											8×11.5	2.0	52
3.3											8×11.5	2.0	68
4.7											8×11.5	1.8	105
5.6											8×11.5	1.6	125
6.8											8×11.5	1.5	155
10		6.3×11	1.8	85	6.3×11	1.8	85	6.3×11	1.8	95	8×11.5	1.3	195
22		6.3×11	1.5	120	6.3×11	1.5	120	6.3×11	1.3	130	8×11.5	0.8	250
33		6.3×11	1.2	135	6.3×11	1.2	140	6.3×11	1.2	155	8×11.5	0.7	300
47		6.3×11	0.95	150	6.3×11	0.85	155	8×11.5	0.8	345	8×16	0.5	385
100		8×11.5	0.60	240	8×11.5	0.50	320	8×11.5	0.3	360	10×12.5	0.4	390
220		8×11.5	0.50	320	8×11.5	0.45	360	10×12.5	0.3	625	10×20	0.18	525
					8×16	0.40	415						
330		8×11.5	0.45	365	10×12.5	0.30	625	10×16	0.10	805	10×20	0.18	1005
					10×16	0.25	785				12.5×20	0.090	1100
470		10×12.5	0.18	630	10×16	0.10	795	10×20	0.10	965	12.5×25	0.080	1180
1000		10×20	0.10	965	12.5×20	0.07	1110	12.5×25	0.065	1440	16×30	0.060	2200
2200		12.5×25	0.040	1440	16×30	0.034	2310	16×35	0.031	2540	18×40	0.029	2810
3300		16×30	0.034	2330	16×35	0.031	2540	18×35	0.028	2810			
4700		16×35	0.031	2540									

ALUMINIUM ELECTROLYTIC CAPACITORS

SMD

MINIATURE

BI-POLAR

STANDARD

LOW-ESR

HIGH RELIABILITY

SNAP-IN

SCREW

规格特性表  
Table of specifications and characteristics

C <sub>R</sub> (μF)	U <sub>R</sub> (V)	63			100			200			250			400		
		ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 125°C mA	ΦD×L mm*mm	ESR <sub>max</sub> 100KHz 25°C Ω	I <sub>AC,max</sub> 100KHz 125°C mA
1.0		8×11.5	2.5	30	8×11.5	5.0	30	6.3×11	18.5	55	6.3×11	18.5	60	6.3×11	25.0	60
														8×11.5	25.0	60
1.5		8×11.5	2.5	30	8×11.5	4.8	35	6.3×11	18.5	70	6.3×11	18.5	70	8×11.5	25.0	70
														8×16	25.0	70
1.8		8×11.5	2.0	35	8×11.5	4.8	40	6.3×11	18.5	75	6.3×11	18.5	75	8×11.5	13.5	77
														8×16	13.5	77
2.2		8×11.5	1.8	45	8×11.5	4.5	45	6.3×11	15.2	80	6.3×11	15.2	80	8×11.5	10.15	80
														8×16	10.15	80
2.7		8×11.5	1.8	45	8×11.5	4.2	45	6.3×11	15.2	85	6.3×11	10.15	85	8×16	6.82	90
														8×20	6.82	90
3.3		8×11.5	1.5	65	8×11.5	4.0	65	6.3×11	10.15	90	6.3×11	10.15	95	8×16	6.82	115
														8×20	6.82	115
4.7		8×11.5	1.5	100	8×11.5	3.8	100	6.3×11	10.15	100	8×11.5	7.98	115	8×20	5.69	120
								8×11.5	7.98	100				10×16	5.69	120
5.6		8×11.5	1.5	110	8×11.5	3.8	120	8×11.5	7.98	125	8×11.5	7.98	125	10×16	5.69	140
								8×16	7.98	125	8×16	7.98	125	10×20	5.35	140
6.8		8×11.5	1.5	135	8×11.5	3.6	140	8×11.5	7.98	155	8×11.5	7.98	165	10×20	5.35	150
								8×16	3.65	175	8×16	3.65	175			
10		8×11.5	1.2	155	8×11.5	3.5	170	8×16	3.65	190	8×16	3.65	195			
								8×20	3.65	190	8×20	3.65	245			
15		8×11.5	1.0	175	8×11.5	3.0	195	8×16	3.24	225	10×16	3.24	245			
								8×20	3.24	225						
22		8×11.5	0.9	195	8×11.5	1.8	225	10×16	3.24	245	10×20	3.24	285			
33		8×11.5	0.73	200	10×12.5	1.2	265	10×25	1.65	325	12.5×20	1.65	365			
47		10×12.5	0.48	310	10×16	0.6	325									
100		10×20	0.30	655	12.5×20	0.45	675									
220		12.5×20	0.25	825	16×25	0.20	1110									
330		12.5×25	0.13	1005	16×30	0.10	1310									
470		16×25	0.11	1495	18×30	0.092	1600									
1000		16×30	0.08	1860												
1500		18×40	0.07	2360												