

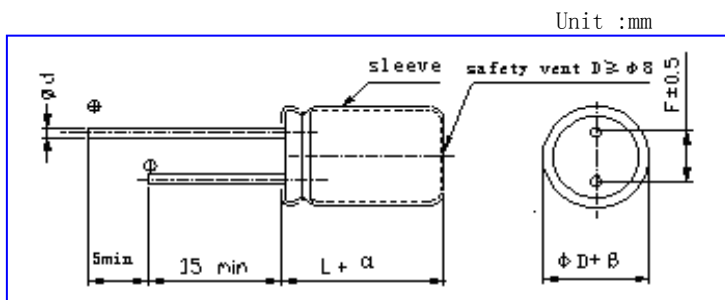
# LW 系列 Series

- 耐高纹波，超耐高温，长寿命，125°C 1000 小时~4000 小时  
High Ripple Current wide Temperature, extremely Long Life, Life time +125°C 1000 hours~4000 hours
- 专为 LED 驱动电源设计制造  
Specially designed for light emitting diode lamp (LED) drive source
- 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°C ~ +125°C																																			
额定电压范围 Rated voltage range	16V~100V	200V ~ 400V																																		
标称容量范围 Nominal capacitance range	1μF ~4700μF																																			
容量允许偏差 Capacitance tolerance	± 20% (120Hz, +20°C)																																			
漏电流 Leakage current (+20°C)	$I \leq 0.01CV$ 或 $3(\mu A)$ 2分钟 取较大者 (at 20°C, after 2 minutes) (whichever is greater)	$I \leq 0.02 CV + 10 \mu A$ (2分钟, 20°C) $0.02CV + 10 \mu A$ (at 20°C, after 2 minutes)																																		
	C: 标称容量Capacitance (μF); V: 额定电压Rated voltage range (V)																																			
损耗角正切值 Dissipation factor (tg δ) (+20°C, 120Hz)	<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> </tr> <tr> <td>tg δ</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.12</td> <td>0.10</td> </tr> <tr> <td>U<sub>R</sub> (V)</td> <td>100</td> <td>200</td> <td>250</td> <td>400</td> <td></td> </tr> <tr> <td>tg δ</td> <td>0.10</td> <td>0.15</td> <td>0.15</td> <td>0.20</td> <td></td> </tr> </table>					U <sub>R</sub> (V)	16	25	35	50	63	tg δ	0.16	0.14	0.12	0.12	0.10	U <sub>R</sub> (V)	100	200	250	400		tg δ	0.10	0.15	0.15	0.20								
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	When nominal capacitance exceeds 1000μF, add 0.02 to the value above for each 1000μF increase.																																			
温度特性 Temperature characteristics (Impedance ratio at 120Hz)	<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>350</td> <td>400</td> </tr> <tr> <td>Z-40°C / +20°C</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> <td>7</td> </tr> </table>										U <sub>R</sub> (V)	16	25	35	50	63	100	200	250	350	400	Z-40°C / +20°C	4	3	3	3	3	3	6	6	7	7				
U <sub>R</sub> (V)	16	25	35	50	63	100	200	250	350	400																										
Z-40°C / +20°C	4	3	3	3	3	3	6	6	7	7																										
耐久性 Load life	<p>在+125°C 条件下，施加含额定纹波电流的额定电压，持续规定时间，并在+20°C下恢复 16 小时后，电容器应符合下列要求 The following specifications shall be met when the capacitors are restored to +20°C for 16 hours after D.C. bias rated ripple current is applied at +125°C, the peak voltage shall not exceed the voltage.</p> <table border="1"> <tr> <td rowspan="5">Time</td> <td rowspan="5">:</td> <td colspan="2">U<sub>R</sub> (V)</td> <td>16V~100V</td> <td>200V~450V</td> </tr> <tr> <td>φ D</td> <td></td> <td></td> <td></td> </tr> <tr> <td>φ 6.3</td> <td></td> <td>1000hours</td> <td>1000hours</td> </tr> <tr> <td>φ 8</td> <td></td> <td>2000hours</td> <td>2000hours</td> </tr> <tr> <td>φ 10</td> <td></td> <td>2000hours</td> <td>4000hours</td> </tr> <tr> <td>φ ≥12.5</td> <td></td> <td>4000hours</td> <td>4000hours</td> </tr> </table> <p>Capacitance change : ±20%初始测量值以内 ±20% of the Initial measured value Leakage current : ≤初始规定值 ≤the Initial specified value Dissipation factor : ≤2 倍初始规定值 ≤2times of the Initial specified value</p>										Time	:	U <sub>R</sub> (V)		16V~100V	200V~450V	φ D				φ 6.3		1000hours	1000hours	φ 8		2000hours	2000hours	φ 10		2000hours	4000hours	φ ≥12.5		4000hours	4000hours
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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 resumed for 16 hours:</p> <p>Capacitance change : ±20%初始测量值以内 ±20% of the Initial measured value Leakage current : ≤2 倍初始规定值 ≤2 times of the Initial specified value 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



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

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



## ■尺寸 Dimensions

容量 C <sub>e</sub> (μF)	代 码 Code	63V (1J)			100V (2A)			200V (2D)			250V (2E)			400V (2G)		
		Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple	Size	ESR	Ripple
		ΦD× L (mm)	Ω MAX	(mA)	ΦD × L (mm)	Ω MAX	(mA)	ΦD× L (mm)	Ω MAX	(mA)	ΦD× L (mm)	Ω MAX	(mA)	ΦD × L (mm)	Ω MAX	(mA)
1.0	010	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	1R5	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	1R8	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	2R2	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	2R7	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	3R3	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	4R7	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	5R6	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	6R8	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	100	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	150	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	220	8×11.5	0.9	195	8×11.5	1.8	225	10×16	3.24	245	10×20	3.24	285			
33	330	8×11.5	0.73	200	10×12.5	1.2	265	10×25	1.65	325	12.5×20	1.65	365			
47	470	10×12.5	0.48	310	10×16	0.6	325									
100	101	10×20	0.30	655	12.5×20	0.45	675									
220	221	12.5×20	0.25	825	16×25	0.20	1110									
330	331	12.5×25	0.13	1005	16×30	0.10	1310									
470	471	16×25	0.11	1495	18×30	0.092	1600									
1000	102	16×30	0.08	1860												
1500	152	18×40	0.07	2360												

Size ΦD×L(mm)

Maximum Allowable Ripple Current (mA rms) at 125°C 100KHz

Maximum ESR (Ω) at 20°C 100KHz