SLW SERIES

特点 Features

- 耐高纹波，超耐高温，长寿命，125℃ 1000 小时~4000 小时。
  High Ripple Current wide Temperature, extremely Long Life,
  Life time +125℃ 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 Items	特性 Characteristics
使用温度范围 Operating Temperature Range	-40~+125℃
额定电压范围 Rated Voltage Range	16~100V / 200~400V
标称电容量范围 Nominal Capacitance Range	1~4700μF
标称电容量允许偏差 Capacitance Tolerance	±20%（120Hz, +20°C）
漏电流 Leakage Current（+20℃）	I≤0.01CV 或 3(μA) 2分钟 取较大者 (at 20℃, after 2 minutes)（whichever is greater） I≤0.02 CV+10μA (2分钟, 20℃) 0.02CV+10μA (at 20℃ , 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（tgδ） Dissipation Factor (+20℃, 120Hz)	见下表
温度特性 Temperature Characteristics (Impedance ratio at 120Hz)	见下表
耐久性 Load Life	见下表
高温贮存 Shelf Life	+125℃ 1000小时贮存后，恢复16小时后 After storage for 1000 hours at +125℃ and then resumed for 16 hours: 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 ≤2 times of the initial specified value

U_R (V)	16	25	35	50	63
tgδ	0.16	0.14	0.12	0.12	0.12
U_R (V)	100	200	250	400	
tgδ	0.12	0.15	0.15	0.20	

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 1000μF,add 0.02 to the value above for each 1000μF increase.

U_R (V)	16	25	35	50	63	100	200	250	400
Z-40℃ / Z+20℃	4	3	3	3	3	3	6	6	7

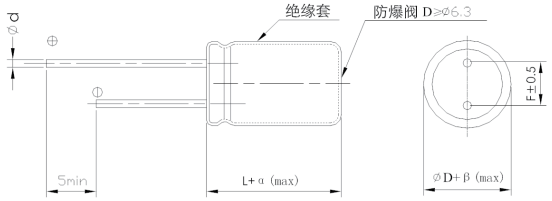
在+125℃ 条件下， 施加含额定纹波电流的额定电压，持续规定时间，并在+20℃下恢复16小时后，电容器应符合下列要求
The following specifications shall be met when the capacitors are restored to +20℃ for 16 hours after D.C. bias rated ripple current is applied at +125℃, the peak voltage shall not exceed the voltage.

Time ：

φD \ U_R (V)	16V~100V	200V~400V
φ6.3	1000 hours	1000 hours
φ8	2000 hours	2000 hours
φ10	2000 hours	4000 hours
φ≥12.5	4000 hours	4000 hours

Capacitance change ： ±20%初始测量值以内 ±20% of the initial measured value
Leakage current ： ≤初始规定值 ≤Initial specified value
Dissipation factor ： ≤2倍初始规定值 ≤2 times of the initial specified value

外形图及尺寸表 Case Size Table



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	﹤L＜20﹥1.5
	﹤L≥20﹥2.0

βMAX	0.5

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尺寸 Dimensions

电压 UR / 项目 Item / 代码 Code / 容量 CR(μF)	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)	ΩMAX	(mA)	φD×L(mm)	ΩMAX	(mA)	φD×L(mm)	ΩMAX	(mA)	φD×L(mm)	ΩMAX	(mA)	φD×L(mm)	ΩMAX	(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
010													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
1R5													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
1R8													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
2R2													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
2R7													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
3R3													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
4R7							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
5R6							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
6R8							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			
100							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			
150							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												

Size φD×L(mm)
Maximum Allowable Ripple Current (mA rms) at 125℃ 100KHz
Maximum ESR (Ω) at 20℃ 100KHz

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LW 系列 Series

特点 Features

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  High Ripple Current wide Temperature, extremely Long Life,
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损耗角正切值（tgδ）
Dissipation Factor (+20℃, 120Hz)

U_R (V)	16	25	35	50	63
tgδ	0.16	0.14	0.12	0.12	0.12
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When nominal capacitance exceeds 1000μF,add 0.02 to the value above for each 1000μF increase.

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(Impedance ratio at 120Hz)

U_R (V)	16	25	35	50	63	100	200	250	400
Z-40℃ / Z+20℃	4	3	3	3	3	3	6	6	7

耐久性
Load Life

在+125℃ 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℃下恢复16小时后，电容器应符合下列要求
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Capacitance change : ±20%初始测量值以内 ±20% of the initial measured value
Leakage current : ≤初始规定值 ≤Initial specified value
Dissipation factor : ≤2倍初始规定值 ≤2 times of the initial specified value

高温贮存
Shelf Life

+125℃ 1000小时贮存后，恢复16小时后
After storage for 1000 hours at +125℃ and then resumed for 16 hours:
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 ≤2 times of the initial specified value

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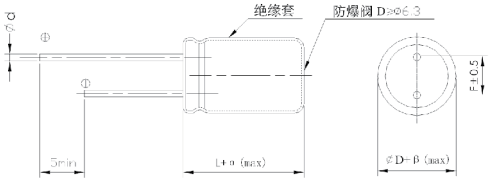

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αMAX	‹ L＜20 › 1.5
	‹ L≥20 › 2.0

βMAX	0.5

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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	21
① Series			② Voltage		③ Capacitance			④ Tolerance	⑤ Size code				⑥ Terminal Code			⑦ Brand	⑧ Sleeve	⑨ Other	⑩ Supplement Code	

① Series

Series is represented by a two-letter code. For example "SGR".

② Voltage

Voltage in volts(V) is represented by a one-digit and one-letter code.
Example:

Voltage(V)	2.5	4	6.3	10	16	25	35	50	63	80	100
Code	0E	0G	0J	1A	1C	1E	1V	1H	1J	1K	2A

Voltage(V)	160	200	250	315	350	400	420	450	500	550
Code	2C	2D	2E	2F	2V	2G	2M	2W	2H	2L

③ Capacitance

Capacitance in μF is represented by a three-digit code.the first two digis are significant and the third digit indicates the number of zeros following the significant figure "R" represents the decimal point for capacitance under 10μF.
Example:

Capacitance(μF)	0.1	0.47	1	4.7	10	47	100	470	1000	4700	10000
Code	0R1	R47	010	4R7	100	470	101	471	102	472	103

④ Tolerance

Tolerance is represented by a one-letter code.
Example:

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

⑤ Size code

Size code is represented by a one-letter and three-digit code. The first one-letter indicate case diameter in mm .The last three digits indicate case length in mm, When the height of a product exceeds 100mm, if the last digit is 0,it is represented by A, otherwise, it is represented by B .
Example:

ΦD	4	5	6.3	8	10	12	12.5	13	16	18	20	22	25	30	35	40	50	63.5	89
Code	B	C	E	F	G	H	I	J	L	M	O	P	Q	R	S	T	U	W	Y

L	5	5.4	9	10	11	11.5	12	14	16	20	25	50	100	105	110	115	120	200	205
Code	050	054	090	100	110	115	120	140	160	200	250	500	10A	10B	11A	11B	12A	20A	20B

Note:When a case size is required and not shown in the table ,please contact with us for further discussion.

⑥ Terminal Code

Terminal Code is represented by a combination of letters or numbers
SMD Type terminal code (please refer to page11)
Radial type terminal code (please refer to page 12~15)
Snap-in Type and ScrewType terminal code(please refer to page 16~17)
Note:When a terminal code is required and not shown in the table ,please contact with us for further discussion.

⑦ Brand

The Surge trademark is represented by the letter "S".

⑧ Sleeve

The sleeve material is represented by the letter E for PET and V for PVC.

⑨ Other

It is represented by a letter or number for rubber shape or other information.

⑩ Supplement Code

For special control purposes.

For example: SGR 16V 2200μF 20% 12.5×25 taping F=5.0 Brand: Surge PVC Sleeve

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

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