LEC series

NEW

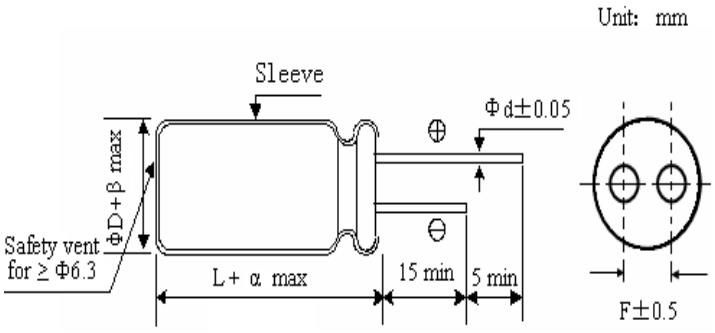
Features

- Low impedance & high ripple current , 2000 to 5000 hours at 105℃.
- Especially designed for LED driver， LED lighting .
- RoHS Compliant .

Specifications

Item	Performance Characteristics
Temperature Range	-40~+105℃
Rated Voltage Range	6.3~100Vdc
Capacitance Range	4.7~15000μF
CapacitanceTolerance	±20%（120Hz，+20℃）
Leakage Current（+20℃,max.）	I≤0.01CV 或 3（μA） After 2 minutes, whichever is greater measured with rated working voltage applied
Dissipation Factor（tgδ）120Hz，+20℃	Working Voltage(Vdc): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 100 D.F (%) max.: 22 / 19 / 16 / 14 / 12 / 10 / 9 / 8 For capacitance>1000μF , Add 2% per another 1000μF (120Hz，+20℃)
Low Temperature Characteristics（120Hz）	Impedance ratio max. Working Voltage(Vdc): 6.3 / 10 / 16 / 25 / 35 / 50 / 63 / 80 / 100 Z-25℃/ Z+20℃: 4 / 3 / 2 / 2 / 2 / 2 / 2 / 2 / 2 Z-40℃/ Z+20℃: 8 / 6 / 4 / 3 / 3 / 3 / 3 / 3 / 3
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple Current is applied for the specified period of time at 105℃ Time: Φ5 to Φ6.3:2000hours ,Φ8 to Φ10:3000hours, ≥Φ13:5000hours Rated Voltage: 6.3 to 10Vdc / 16 to 100Vdc Capacitance Change: ≤±30% of the initial value / ≤±25% of the initial value D.F.(tgδ）: ≤200% of the initial specified value Leakage Current: ≤The initial specified value
Shelf Life	After storing the capacitors under no load at 105℃ for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20℃, they shall meet the specified values for the load life characteristics listed above.
Others	JISC-5101(IEC 60384)

Diagram of Dimensions



Frequency Multipliers

μF \ Hz	120	1K	10K	100K
＜220	0.40	0.75	0.90	1.00
220~470	0.50	0.85	0.94	1.00
680~1500	0.60	0.87	0.95	1.00
2200~3300	0.75	0.90	0.95	1.00
＞3300	0.85	0.95	0.98	1.00

ΦD	5	6.3	8	10	13	16	18
F	2.0	2.5	3.5	5.0	5.0	7.5	7.5
Φd	0.5	0.5	0.5	0.6	0.6	0.8	0.8
α	(L< 20) + 1.5			(L≥20) + 2.0			
β	(D< 20) + 0.5			(D≥20) + 1.0			

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Standard Ratings

Voltage	6.3V			10V			16V			25V		
Cap(μF)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
10							5×11	2.00	125	5×11	2.00	120
22				5×11	1.30	150	5×11	1.30	150	5×11	1.30	150
33	5×11	1.30	150	5×11	1.30	150	5×11	1.30	150	5×11	0.90	160
47	5×11	1.30	150	5×11	1.30	150	5×11	0.80	175	5×11	0.80	175
100	5×11	0.90	165	5×11	0.90	165	6.3×11	0.70	220	6.3×11	0.70	220
220	6.3×11	0.70	220	6.3×11	0.70	220	8×12	0.35	340	8×12	0.35	340
330	6.3×11	0.60	240	8×12	0.35	340	8×12	0.30	380	10×12	0.25	460
470	8×12	0.35	340	8×12	0.30	380	10×12	0.25	460	10×17	0.20	540
1000	10×12	0.25	460	10×17	0.20	540	10×20	0.17	670	13×20	0.15	940
2200	13×20	0.12	940	13×20	0.12	940	13×25	0.080	1160	16×25	0.070	1380
3300	13×20	0.10	1060	13×25	0.080	1160	16×25	0.070	1380	16×30	0.060	1760
4700	16×25	0.080	1160	16×25	0.070	1380	16×30	0.060	1760	18×35	0.050	1990
6800	16×25	0.070	1380	16×30	0.060	1760	18×35	0.050	1990	18×40	0.040	2370
10000	16×30	0.060	1760	18×35	0.050	1990	18×40	0.040	2370			
15000	18×35	0.050	2100									

Voltage	35V			50V			63V			100V		
Cap(μF)	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current	Case Size	Impedance	Ripple Current
4.7	5×11	3.00	100	5×11	3.00	100	5×11	4.00	89	5×11	4.00	89
10	5×11	2.00	120	5×11	2.00	120	5×11	2.50	110	6.3×11	1.70	180
22	5×11	1.30	150	5×11	1.30	150	6.3×11	1.20	180	8×12	0.66	280
33	5×11	1.30	150	6.3×11	0.70	220	6.3×11	1.20	180	10×12	0.50	300
47	6.3×11	0.70	220	6.3×11	0.70	220	8×12	0.56	300	10×12	0.42	380
100	8×12	0.35	340	8×12	0.35	340	10×12	0.50	380	13×20	0.21	800
220	10×12	0.25	460	10×17	0.20	540	10×20	0.27	620	16×25	0.090	1440
330	10×17	0.20	540	10×20	0.17	670	13×20	0.16	890	16×25	0.090	1440
470	10×20	0.17	670	13×20	0.10	940	13×20	0.14	1040	16×30	0.060	1790
1000	13×25	0.080	1160	16×25	0.070	1380	16×30	0.060	1790	18×40	0.040	2370
2200	16×30	0.060	1600	18×35	0.050	1990	18×40	0.040	2370			
3300	18×35	0.050	1990	18×40	0.040	2370						
4700	18×40	0.040	2370									

Max Allowable Ripple Current (mA,rms) at 105℃ 100KHz, Max Impedance(Ω) at 20℃ 100 KHz,Case Size ΦD×L(mm).

Above size is the standard size for our product. If you need special size please contact our sales offices.