

## LC Series

**Features**  
 Lifetime: 105 ,5000hrs  
 Wide temperature range  
 Low ESR  
 Low Impedance

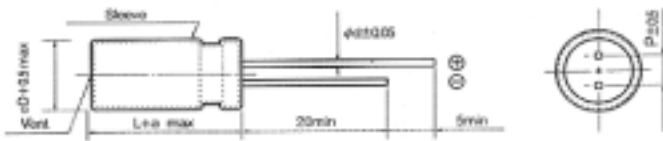
**Recommended Applications**  
 AV(TV, Video, Audio)  
 Monitor/Computer  
 OA/HA/Communication  
 Converter/Inverter  
 SMPS  
 Ballast



### Specifications

Items	Characteristics						
Capacitance Tolerance	$\pm 20\%$ (M) (120Hz, 20 )						
Rated Voltage Range (WV)	160~450VDC						
Operating Temperature Range	-40 ~ +105						
Surge Voltage (V) (20 )	WV	160	200	250	350	400	450
	SV	200	250	300	400	450	500
Leakage Current (Max) (20 )	$I = 0.03CV + 40 \mu A$ (CV $\leq 1000$ ) $I = 0.02CV + 25 \mu A$ (CV $> 1000$ ) (After rated voltage applied for 5 minutes)						
	$I =$ Leakage Current ( $\mu A$ ) $C =$ Nominal Capacitance ( $\mu F$ ) $V =$ Rated Voltage (V)						
Dissipation Factor (Max) (tan ) (120Hz, 20 )	WV	160	200	250	350	400	450
	tan	0.15	0.15	0.15	0.24	0.24	0.24
Low Temperature Stability Impedance Ratio (Max)	WV	160	200	250	350	400	450
	Z (120Hz) Z(-40 ) / Z(20 )	6	6	6	6	6	6
Load Life	After applying rated voltage for 5000 hours at 105 , the capacitor shall meet the following requirement.						
	Capacitance Change	Within $\pm 20\%$ of the initial value					
	Dissipation Factor	Not more than 200% of the specified value					
Shelf Life	After placed at 105 without voltage applied for 1000 hours, the capacitor shall meet the same requirement as load life						
	Others	Satisfied JIS C 5101					

### Dimensions (mm)



D	10	13	16	18
P	5.0	5.0	7.5	7.5
d	0.6	0.6 (0.8)	0.8	0.8
a	1.0	2.0	2.0	2.0

( ) : L

### Multiplier for Ripple Current

Frequency coefficient

Frequency (Hz)	50	120	1K	10K	100K
Coefficient	0.45	0.55	0.75	0.85	1.00

Temperature coefficient

Ambient Temperature ( )	50	70	85	105
Coefficient	1.90	1.75	1.40	1.00

**Case Size / Max Ripple Current / Impedance**

CASE SIZE ( DxL)/ MAX PERMISSIBLE RIPPLE CURRENT (RC (mArms)/100KHz,105 ) /  
 MAX IMPEDANCE (Z( ) / 100KHz,20 )

WV	160			200			250		
μ F \ SPEC	DxL	RC	Z	DxL	RC	Z	DxL	RC	Z
10							10x20	300	3.5
22	10x20	415	1.52	10x20	440	1.50	13x20	480	2.3
33	10x20	565	1.30	13x20	590	0.91	13x25	630	1.7
47	13x20	725	0.91	13x20	780	0.91	13x25	630	1.7
68	13x25	970	0.63	13x25	950	0.63	16x26	1000	0.78
100	16x26	1280	0.27	16x26	1280	0.27	16x32	1400	0.63
220	16x32	1300	0.22	18x32	1700	0.22	18x40	1485	0.35
330	18x36	1700	0.22						

WV	350			400			450		
μ F \ SPEC	DxL	RC	Z	DxL	RC	Z	DxL	RC	Z
3.3							10x12.5	120	8.5
4.7							10x12.5	165	6.5
10	10x20	100	3.0	10x20	180	2.9	13x20	315	2.5
22	13x20	270	2.1	13x25	300	1.35	16x26	570	1.7
33	13x25	600	1.0	16x26	600	0.95	16x32	620	1.1
47	16x26	700	0.75	16x32	700	0.75	18x32	900	0.93
100	18x32	1170	0.40	18x36	1250	0.34			