

# LZ series

- Snap-in type, 105°C 2000 hours standard product.
- High temperature and high ripple current resistance.
- Suitable for computer equipment, inverter air conditioner etc.
- RoHS Compliance
- 基板自立 105°C 2000小時標準品。
- 耐高溫、高紋波。
- 適用於電腦設備、變頻空調等。



## SPECIFICATIONS

Items 項目	Characteristics 特性													
Capacitance Tolerance 靜電容量誤差	± 20%(120Hz,20°C)													
Operating Temperature Range 適用溫度範圍	-40 ~ +105°C							-25 ~ +105°C						
Rated Voltage Range 額定電壓範圍	10 ~ 250VDC							350 ~ 500VDC						
Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ ( $\mu A$ ) ( After 5 minutes application of DC rated voltage, at 20 °C )													
Dissipation Factor 散逸因素( $\tan \delta$ )	Measurement Frequency: 120Hz. Temperature: 20°C													
	Rated Voltage(V)	6.3	10	16	25	35	50	63	80	100	160 ~250	315	350 ~500	550 ~600
	$\tan \delta$ (Max)	0.50	0.45	0.40	0.35	0.30	0.25	0.25	0.20	0.20	0.15	0.20	0.20	0.20
When nominal capacitance over 1000 $\mu F$ , $\tan \delta$ shall be added 0.01 to the listed value with increase of every 1000 $\mu F$ .														
Low Temperature Stability 低溫特性 Impedance Ratio(Max) 阻抗比率(最大值)	Measurement Frequency: 120Hz.													
	Rated Voltage(V)	10	16	25	35	50	63~100	160~250	350~500					
	Z(-25°C)/Z(20°C)	6	6	4	4	4	4	4	4	8				
Z(-40°C)/Z(20°C)	16	15	10	10	8	6	15	-						
Load Life 負荷壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied for 2,000 hours at 105°C.													
	Capacitance Change	Within ± 20% of Initial Value												
	$\tan \delta$	200% or less of Initial Specified Value												
Leakage Current	Initial Specified Value or less													
Shelf Life 放置壽命	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours 105°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.													
	Capacitance Change	Within ± 15% of Initial Value												
	$\tan \delta$	200% or less of Initial Specified Value												
Leakage Current	Initial Specified Value or less													
Standards 參照標準	JIS C 5101-4 (IEC 60384)													

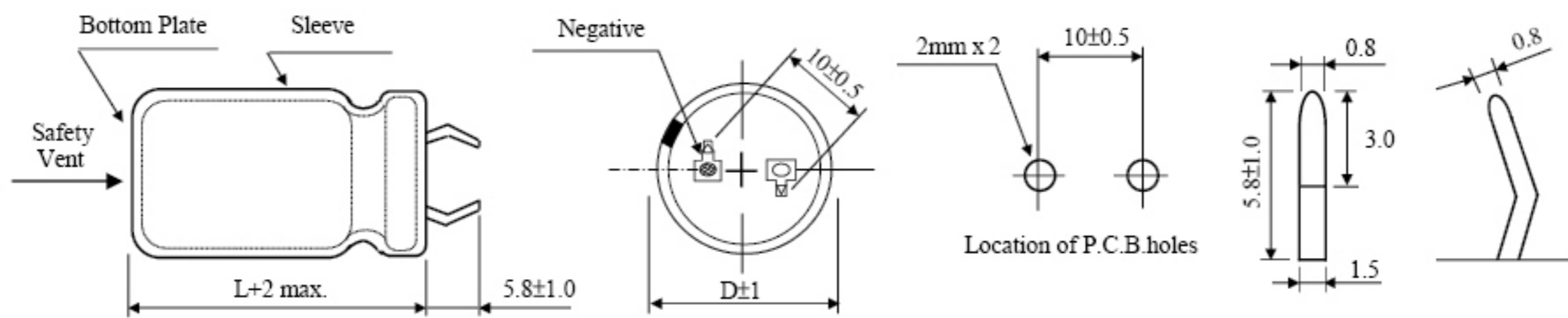
## Frequency Coefficient of Permissible Ripple Current

Rated Voltage (V)	Frequency (Hz)				
	50	120	1K	10K	100K
10 ~ 100	0.88	1.00	1.15	1.15	1.20
160 ~ 250	0.85	1.00	1.15	1.20	1.20
350 ~ 500	0.88	1.00	1.10	1.15	1.20

The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise. When long life performance is required in actual use , the rms ripple current has to be reduced.

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## DIMENSIONS(mm)



## STANDARD RATINGS

D×L(mm) ; R.C.(A rms) at 105°C 120Hz

Cap (μF)	V	10		16		25		35		50	
		Item	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L
1500										22x25	1.20
1800										22x30	1.40
2200										22x30 25x25	1.60
2700								22x25	1.21	22x35 25x30	1.73
3300								22x30	1.36	22x40 25x30	1.97
3900						22x25	1.35	22x30	1.57	22x45 25x35	2.23
4700						22x30	1.58	22x35 25x25	1.77	22x50 25x40	2.45
5600						22x30 25x25	1.75	22x40 25x30	1.99	25x45 30x35	2.74
6800				22x25	1.80	22x35 25x30	2.02	22x45 25x35	2.29	30x40 35x30	3.31
8200				22x30 25x25	2.08	22x40 25x35	2.18	22x50 25x40	2.58	30x45 35x35	3.60
10000		22x25	1.88	22x35 25x30	2.15	22x45 25x40	2.48	25x45 30x35	2.90	35x40	4.02
12000		22x30 25x25	2.18	22x40 25x30	2.31	22x50 25x45	2.86	25x50 30x40	3.24	35x50	4.52
15000		22x35 25x30	2.27	22x45 25x35	2.69	25x50 30x40	3.15	30x45 35x35	3.65		
18000		22x40 25x30	2.41	22x50 25x40	3.20	30x45 35x35	3.55	35x40	4.13		
22000		22x45 25x35	2.68	25x45 30x35	3.40	30x50 35x40	4.00	35x50	4.78		
27000		25x40 30x35	3.17	30x40 35x35	3.85	35x45	4.55				
33000		25x45 30x35	3.39	30x50 35x40	4.32	35x50	5.56				
39000		25x50 30x40	3.72	35x40	4.85						
47000		30x45 35x35	4.22	35x50	5.56						
56000		35x40	5.00								
68000		35x50	5.21								

## LZ series

## STANDARD RATINGS

D×L(mm) ; R.C.(A rms) at 105°C 120Hz

Cap ( $\mu$ F)	V Item	63		80		100		160		200	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
220										22x25	0.82
270								22x25	1.04	22x30	1.07
330								22x30	1.26	22x30 25x25	1.28
390								22x30 25x25	1.29	22x35 25x30	1.31
470								22x35 25x30	1.56	22x40 25x30	1.58
560						22x25	1.02	22x40 25x30	1.69	22x45 25x35	1.72
680						22x30	1.12	22x45 25x35	1.72	25x40 30x30	1.75
820				22x25	1.04	22x30 25x25	1.32	22x50 25x40	1.99	25x50 30x35	2.04
1000				22x30	1.21	22x35 25x30	1.45	25x45 30x35	2.20	30x45 35x35	2.30
1200		25x25	1.21	22x35 25x25	1.29	22x40 25x35	1.68	30x40 35x35	2.45	30x50 35x40	2.65
1500		22x30 25x25	1.45	22x40 25x30	1.57	22x45 25x40	1.98	30x50 35x40	3.06	35x45	3.07
1800		22x35 25x30	1.59	22x45 25x35	1.72	25x45 30x35	2.23	35x45	3.14		
2200		22x40 25x30	1.84	25x40 30x30	2.01	25x50 30x40	2.53	35x50	3.50		
2700		22x45 25x35	2.12	25x45 30x35	2.32	30x45 35x35	2.82				
3300		25x40 30x30	2.30	30x40 35x30	2.62	30x50 35x40	3.32				
3900		25x45 30x35	2.42	30x45 35x35	2.84	35x45	3.62				
4700		25x50 30x40	2.91	30x50	3.29	35x50	3.80				
5600		30x45 35x35	3.18	35x45	3.82						
6800		30x50 35x40	3.54	35x50	3.92						
8200		35x45	3.82	35x50	4.05						
10000		35x50	4.50	35x55	4.85						

## LZ series

## STANDARD RATINGS

D×L(mm) ; R.C.(A rms) at 105°C 120Hz

Cap ( $\mu$ F)	V Item	250		350		400		450		500	
		D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.	D x L	R.C.
68						22x25	0.52	22x35 25x30	0.55	22x40	0.56
82				22x25	0.60	22x30	0.66	22x35 25x30	0.65	25x35	0.68
100				22x30	0.69	22x35 25x25	0.72	22x40 25x30	0.75	25x35	0.78
120		20x20	0.65	22x35 25x30	0.76	22x40 25x30	0.75	22x45 25x40	0.83	25x45	0.85
150		22x25	0.76	22x40 25x30	0.79	22x45 25x35	0.89	22x50 25x40	0.95	25x50 30x40	1.01
180		22x30	0.98	22x45 25x35	0.88	22x50 25x40	0.98	25x45 30x40	1.15	30x45 35x35	1.21
220		22x30 25x25	1.09	22x50 25x40	0.98	25x45 30x35	1.12	30x45 35x40	1.24	30x45 35x40	1.35
270		22x35 25x30	1.19	25x45 30x35	1.10	25x50 30x40	1.29	30x50 35x45	1.46	35x45	1.53
330		22x40 25x35	1.35	30x40 35x35	1.22	30x45 35x35	1.45	35x50	1.65	35x50	1.75
390		22x45 25x35	1.52	30x45 35x40	1.42	30x50 35x40	1.59	35x55	1.78		
470		22x50 25x40	1.63	35x45	1.62	35x45	1.75				
560		25x45 30x35	1.84	35x50	1.89	35x50	2.12				
680		25x50 30x40	2.05	35x50	2.10	35x50	2.20				
820		30x45 35x35	2.29	35x65	2.35	35x65	2.50				
1000		35x40	2.49								
1200		35x45	2.84								