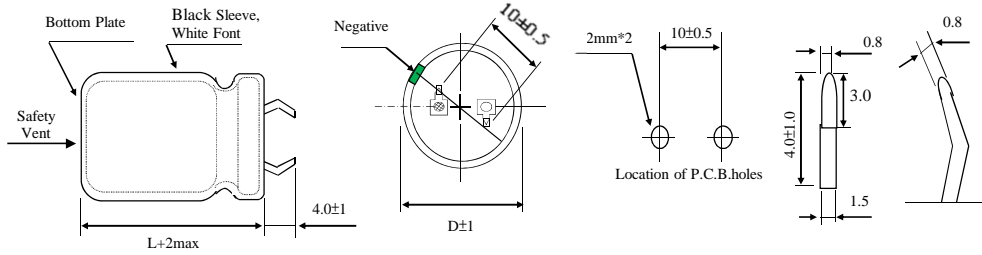


**DONG GUAN KUAN KUN ELECTRONIC CO., LTD**  
 YIN HE INDUSTRIAL ZONE , QING XI TOWN, TEL: +86-769- 87318000  
 DONG GUAN CITY, GUAN DONG , CHINA (P.R.O.C) FAX: +86-769- 87318008

DIMENSIONS(mm)

**FOR APPROVAL**



<b>Customer :</b> Ozdisan		<b>Electrolytic Capacitors</b> <b>LZ Series</b>									<b>Su'scon</b> <b>Code</b>	
Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max(uA)	D.F. Max (%)	Max.Ripple Current ( A )	Load Life (Hours)	
	LZ450A221N400E99YS0A	220	-0 +20	450	500	105	25*40	943	20	1.13	2000	

**REMARKS:**

- Leakage Current Test:** at 20°C for 5 minutes .
- Operating temperature:** 450V -40°C~ +105°C.
- Dissipation Factor Test:** at 20°C, 120 Hz.
- Capacitance Test:** at 20°C, 120 Hz.
- Ripple Current Test:** at 105°C, 120 Hz .
- Load Life:** 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.
- Capacitance Change:** Within±20% of initial value;
- tanδ:** 200% or less of initial specified value;
- Leakage Current:** Initial specified value or less;
- Shelf Life:** The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105 °C without voltage applide. 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;
- tanδ:** 200% or less of initial specified value;
- Leakage Current:** Initial specified value or less.
- 8. when have characteristic requested :** Load life & shelf life test and etc. , judgment standard reference to our catalogue.

**●SPECIFICATION**

Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (uA) (After 5 minutes application of working voltage)										
Dissipation Factor 散逸因素 (損失角)	Measurement Frequency:120Hz. Temperature:20°C										
(tan δ)	Rate Voltage(V)	10	16	25	35	50	63	80	100	160~250	350~550
	tan δ (MAX)	0.45	0.40	0.35	0.30	0.25	0.25	0.20	0.20	0.15	0.20
	When nominal capacitance over 1000μF, tanδ shall be added 0.01 to the listed value with increase of every 1000μF.										
Standards 參照標準	JIS C-5101-4(IEC 60384)										

**●RIPPLE CURRENT COEFFICIENTS**

Frequency coefficient of allowable 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
350~550	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.

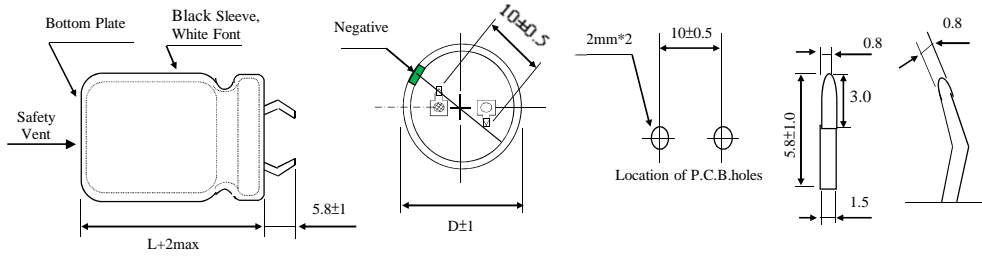
Production date:2023.04.17

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## FOR APPROVAL

DIMENSIONS(mm)



Customer :		Electrolytic Capacitors									Su'scon	
Ozdisan		LZ Series									Code	
Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max(uA)	D.F. Max (%)	Max.Ripple Current ( A )	Load Life (Hours)	
	LZ450A221N400E99YL0A	220	-0 +20	450	500	105	25*40	943	20	1.13	2000	
	LZ500M681Q500E99YL0A	680	±20	500	550	105	40*50	1749	20	1.55	2000	
	LZ600M391Q500E99YL0A	390	±20	600	650	105	40*50	1451	20	1.15	2000	

**REMARKS:**

1. Leakage Current Test:	at 20°C for 5 minutes .
2. Operating temperature:	450V&500V&600V -40°C~ +105°C.
3. Dissipation Factor Test:	at 20°C, 120 Hz.
4. Capacitance Test:	at 20°C, 120 Hz.
5. Ripple Current Test:	at 105°C, 120 Hz .
6. Load Life:	2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.
Capacitance Change:	Within±20% of initial value;
tanδ:	200% or less of initial specified value;
Leakage Current:	Initial specified value or less;
7. Shelf Life:	The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105 °C without voltage applide. 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;
tanδ:	200% or less of initial specified value;
Leakage Current:	Initial specified value or less.
8. when have characteristic requested :	Load life & shelf life test and etc. , judgment standard reference to our catalogue.

**●SPECIFICATION**

Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (uA) (After 5 minutes application of working voltage)										
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature:20°C										
	Rate Voltage(V)	10	16	25	35	50	63	80	100	160~250	350~600
	tan δ (MAX)	0.45	0.40	0.35	0.30	0.25	0.25	0.20	0.20	0.15	0.20
When nominal capacitance over 1000μF, tanδ shall be added 0.01 to the listed value with increase of every 1000μF.											
Standards 参照標準	JIS C-5101-4(IEC 60384)										

**●RIPPLE CURRENT COEFFICIENTS**

Frequency coefficient of allowable ripple current					
Rated Voltage(V)	Frequency(Hz)				
	50	120	1k	10k	100k
10~100	0.88	1.00	1.15	1.15	1.20
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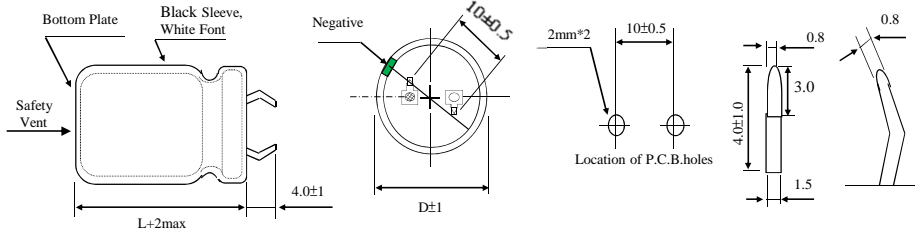
The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5°C rise.

When long life performance is required in actual use, the rms ripple current has to be reduced.

Production date:2023.04.17

DIMENSIONS(mm)

**FOR APPROVAL**



<b>Customer :</b> Ozdisan		<b>Electrolytic Capacitors</b> <b>LZ Series</b>								<b>Su'scon</b> <b>Code</b>		
Electric Characteristics:												
Ozdisan P/N	Su'scon P/N	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max(uA)	D.F. Max (%)	Max.Ripple Current ( A )	ESR 120 Hz at 25°C(Ω)Max	Load Life (Hours)
	LZ450M561P450E99YS0A	560	±20	450	500	105	35*45	1505	15	1.90	0.900	2000

**REMARKS:**

1. Leakage Current Test: at 20°C for 5 minutes .

2. Operating temperature: 450V -40°C~ +105°C.

3. Dissipation Factor Test: at 20°C, 120 Hz.

4. Capacitance Test: at 20°C, 120 Hz.

5. Ripple Current Test: at 105°C, 120 Hz .

6. Load Life: 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.

Capacitance Change: Within±20% of initial value;

tanδ: 200% or less of initial specified value;

Leakage Current: Initial specified value or less;

7. Shelf Life: The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105 °C without voltage applide. 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;

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**●SPECIFICATION**

Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (uA) (After 5 minutes application of working voltage)											
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature:20°C											
	Rate Voltage(V)	10	16	25	35	50	63	80	100	160~250	350~400	450
	tan δ (MAX)	0.45	0.40	0.35	0.30	0.25	0.25	0.20	0.20	0.15	0.20	0.15
Standards 參照標準	JIS C-5101-4(IEC 60384)											

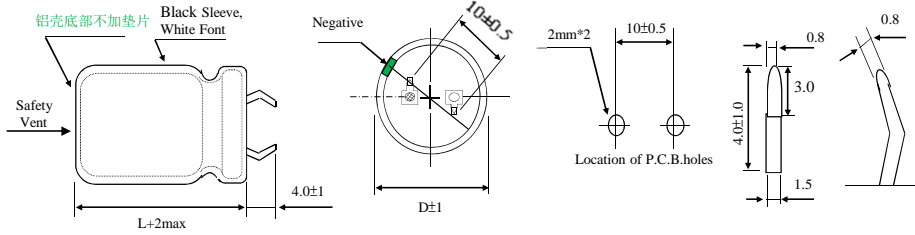
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Rated Voltage(V)	Frequency(Hz)				
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350~450	0.88	1.00	1.10	1.15	1.20

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.  
 Production date:2023.04.17

DIMENSIONS(mm)

**FOR APPROVAL**



<b>Customer :</b> Ozdisan		<b>Electrolytic Capacitors</b> <b>LZ Series</b>								<b>Su'scon</b> <b>Code</b>		
Electric Characteristics:												
Ozdisan	Su'scon	Cap. (uF)	Cap. Tol. (%)	Rate Volt. (V-DC)	Surge Volt. (V-DC)	Oper. Temp. (°C)	Nominal Case Size D*L(mm)	Leakage Current Max(uA)	D.F. Max (%)	Max.Ripple Current (A)	ESR 120 Hz at 25°C(Ω)Max	Load Life (Hours)
P/N	P/N	680	-0 +20	450	500	105	35*55	1659	20	2.80	0.390	2000

**REMARKS:**

1. Leakage Current Test: at 20°C for 5 minutes .

2. Operating temperature: 450V -40°C~ +105°C.

3. Dissipation Factor Test: at 20°C, 120 Hz.

4. Capacitance Test: at 20°C, 120 Hz.

5. Ripple Current Test: at 105°C, 120 Hz .

6. Load Life: 2000 hours,subjected to DC voltage with the rated ripple current is applied at 105°C.

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7. Shelf Life: The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1000 hours 105 °C without voltage applide. Before the measurement, the capacitor shall be preconditioned by applying voltage according to them 4.1 of JIS C5101-4.

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Leakage Current 洩漏電流	$I \leq 3\sqrt{CV}$ (uA) (After 5 minutes application of working voltage)											
Dissipation Factor 散逸因素 (損失角) (tan δ)	Measurement Frequency:120Hz. Temperature:20°C											
	Rate Voltage(V)	10	16	25	35	50	63	80	100	160~250	350~550	
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