

LS Series



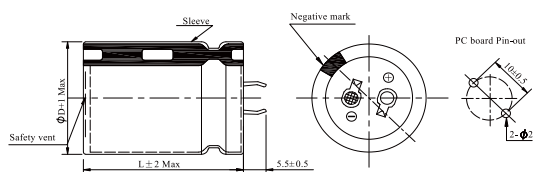
- No sparks against DC over-voltage
- Endurance with ripple current: 5,000 hours at 105°C
- RoHS Compliant

◆ SPECIFICATIONS

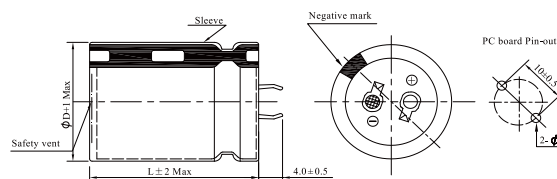
Item	Performance Characteristics		
Category Temperature Range	-25 ~ +105°C		
Working Voltage Range	200 ~ 400Vdc		
Capacitance Range	68 ~ 1,500μF		
Capacitance Tolerance	±20% (at 20°C and 120Hz)		
Dissipation Factor (tanδ) (at 20°C, 120Hz)	Rated Voltage (V)	200	400
	tanδ(Max)	0.15	0.15
ESL	50nH max		
Leakage Current	$I \leq 3 \sqrt{CV}$ I: Leakage current (μA) C: Rated capacitance (μF) V: Rated voltage (V) Impress the rated voltage for 5 minutes		
DC Over Voltage Test	When an excessive DC voltage is applied to the capacitors under the test conditions on next page, the vent shall operate and then the capacitors shall become open-circuit without burning materials.		
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	200	400
	Z(-25°C)/Z(+20°C)	4	4
Endurance	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 5,000 hours at 105°C.		
	Capacitance change	≒ ±20% of the initial value	
	Dissipation factor(tanδ)	≒ 200% of the specified value	
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20°C after the rated voltage applied for 1,000 hours at 105°C without voltage applied.		
	Capacitance change	≒ ±20% of the initial value	
	Leakage current	≒ 200% of the specified value	

◆ DIMENSIONS (mm)

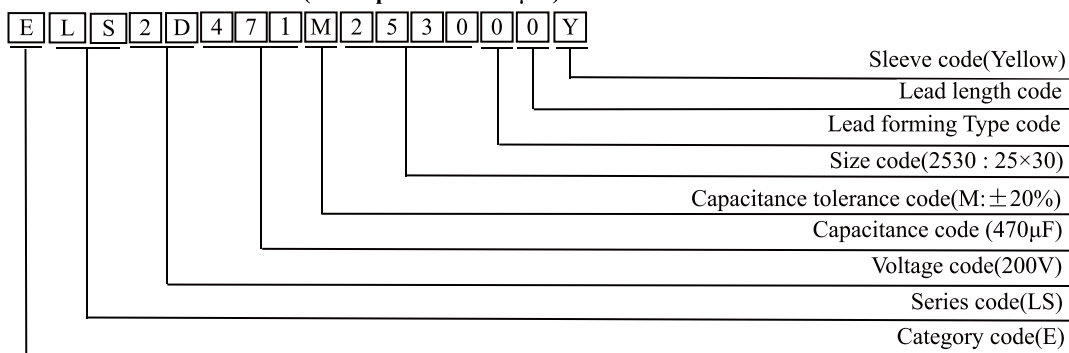
Terminal Code : 00 : Standard



Terminal Code :0D



◆ PART NUMBER SYSTEM (Example : 200V 470μF)



LS Series

◆ Case size & Permissible rated ripple current: (mA rms) at 105°C / 120Hz.

Vdc ΦD μF	200								Vdc ΦD μF	400							
	Φ 22		Φ 25		Φ 30		Φ 35			Φ 22		Φ 25		Φ 30		Φ 35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
180	22×25	950							68	22×25	450						
220	22×25	1100							82	22×25	590						
270	22×30	1220	25×25	1220					100	22×30	690	25×25	700				
330	22×30	1380	25×25	1390					120	22×35	770	25×30	770				
390	22×35	1550	25×30	1580	30×25	1550			150	22×45	900	25×35	920	30×25	930		
470	22×40	1730	25×30	1710	30×25	1780			180	22×50	1010	25×40	1030	30×30	1030	35×25	1100
560	22×45	1810	25×35	1870	30×30	1980	35×25	2100	220			25×45	1160	30×35	1170	35×30	1240
680	22×50	2180	25×40	2090	30×35	2220	35×30	2360	270			25×50	1310	30×40	1330	35×35	1390
820			25×50	2390	30×40	2530	35×30	2610	330					30×45	1510	35×40	1480
1000					30×50	2880	35×35	2880	390					30×50	1670	35×45	1770
1200							35×40	2960	470							35×50	1980
1500							35×50	3120	560							35×50	1920

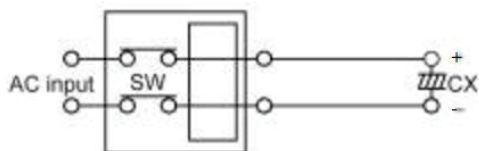
◆ DC Over Voltage Test Conditions

The vent will operate and the capacitor shall become an open circuit without burning materials when the following excess DC voltage is applied.

◆ Test DC voltage

Vdc	Capacitance	Current limit	Test DC voltage
200	< 330μF	4A	250/300Vdc
	330 ≤ Cap. < 470μF	5A	
	≥ 470μF	7A	
400	< 100μF	2A	500/600Vdc
	100 ≤ Cap. < 220μF	4A	
	≥ 220μF	7A	

◆ Test Circuit



Constant DC voltage/current power supply

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

Vdc	Frequency (Hz)			
	120	1K	10K	100K
200	1.00	1.32	1.45	1.50
400	1.00	1.30	1.41	1.43