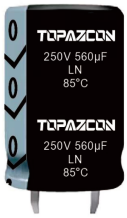
LN Series

- **Standard,Long life down size and high ripple current**
- **Load life 3,000 hours at 85℃**
- **RoHS Compliant**

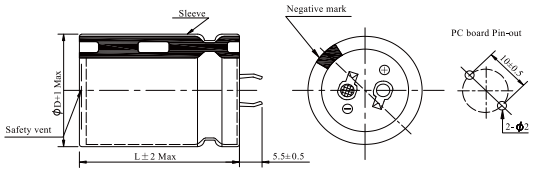


◆ SPECIFICATIONS

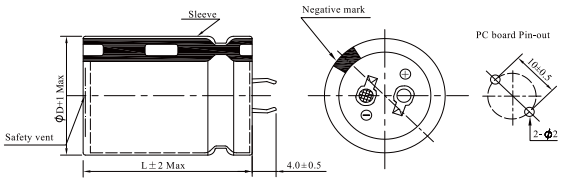
Item	Performance Characteristics
Category Temperature Range	-25 ~ +85℃
Working Voltage Range	200 ~ 450Vdc
Capacitance Range	82 ~ 2,200μF
Capacitance Tolerance	±20% (at 20℃ and 120Hz)
Dissipation Factor (tanδ) (at 20℃, 120Hz)	Rated Voltage (V): 200, 220, 250, 400, 420, 450 tanδ(Max): 0.20, 0.20, 0.20, 0.20, 0.20, 0.20
Leakage Current	$I \leqslant 3\sqrt{CV}$ I: Leakage current (μA) C : Rated capacitance (μF) V : Rated voltage (V) Impress the rated voltage for 5 minutes
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V): 200 ~ 250, 400, 420 ~ 450 Z(-25℃)/Z(+20℃): 4, 4, 8 (at 120Hz)
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 3,000 hours at 85°C. Capacitance change: ≦ ±20% of the initial value Dissipation factor(tanδ): ≦ 200% of the specified value Leakage current: ≦ specified value
Shelf Life	The following requirements shall be satisfied when the capacitor are restored to 20℃ after the rated voltage applied for 1,000 hours at 85℃ without voltage applied. Capacitance change: ≦ ±20% of the initial value Dissipation factor(tanδ): ≦ 200% of the specified value Leakage current: ≦ 200% of the specified value

◆ DIMENSIONS (mm)

Terminal Code : 00 : Standard



Terminal Code :0D



◆ PART NUMBER SYSTEM(Example : 250V 560μF)

E L N 2 E 5 6 1 M 2 2 5 0 0 0 B

- Sleeve code(Black)
- Lead length code
- Lead forming Type code
- Size code(2250 : 22×50)
- Capacitance tolerance code(M:±20%)
- Capacitance code (560μF)
- Voltage code(250V)
- Series code(LN)
- Category code(E)

LN Series

◆ **Case size & Permissible rated ripple current (mA rms) at 85℃ / 120Hz**

Vdc / ΦD / μF	200								220								
	Φ 22		Φ 25		Φ30		Φ35			Φ 22		Φ 25		Φ30		Φ35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
330	22×25	1320							330	22×30	1450						
390	22×30	1510	25×25	1560					390	22×35	1640	25×30	1590				
470	22×30	1730	25×30	1780					470	22×35	1870	25×35	1900				
560	22×35	1910	25×30	1960	30×25	1960			560	22×40	2030	25×35	2170	30×30	1990		
680	22×40	2170	25×35	2260	30×30	2270			680	22×45	2390	25×40	2330	30×35	2290		
820	22×45	2450	25×40	2540	30×30	2530			820			25×50	2650	30×40	2590	35×30	2540
1000	22×55	2880	25×45	2990	30×35	2870			1000					30×45	3060	35×35	3000
1200			25×50	3290	30×40	3280	35×35	3250	1200					30×50	3390	35×40	3360
1500					30×50	3760	35×40	3710	1500							35×45	3730
1800					30×55	4200	35×45	4190	1800							35×50	4120
2200							35×50	4780	2200								

Vdc / ΦD / μF	250								400								
	Φ 22		Φ 25		Φ30		Φ35			Φ 22		Φ 25		Φ30		Φ35	
	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									100	22×30	900						
220	22×30	1130							120	22×30	1000	25×25	1030				
270	22×30	1370							150	22×35	1130	25×30	1160				
330	22×35	1520	25×30	1470					180	22×40	1290	25×35	1320	30×25	1380		
390	22×40	1720	25×35	1720					220	22×45	1440	25×40	1500	30×30	1520		
470	22×45	1960	25×40	1960	30×30	1860			270			25×45	1630	30×35	1660		
560	22×50	2270	25×45	2140	30×35	2140			330			25×50	1820	30×40	1870	35×30	1870
680			25×50	2440	30×40	2470			390					30×45	2060	35×35	2080
820					30×45	2720	35×35	2700	470					30×50	2280	35×40	2310
1000					30×50	3240	35×40	3180	560							35×45	2600
1200							35×50	3500	680							35×50	2830

Vdc / ΦD / μF	420								450								
	Φ 22		Φ 25		Φ30		Φ35			Φ 22		Φ 25		Φ30		Φ35	
	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC		ΦD×L	RC	ΦD×L	RC	ΦD×L	RC	ΦD×L	RC
82	22×25	780							82	22×25	790						
100	22×30	880	25×25	890					100	22×30	860	25×25	880				
120	22×30	980	25×30	990					120	22×35	980	25×30	1000	30×25	1020		
150	22×35	1100	25×30	1150	30×25	1190			150	22×40	1080	25×35	1130	30×25	1180		
180	22×40	1210	25×35	1300	30×30	1350			180	22×45	1200	25×40	1280	30×30	1320		
220	22×50	1410	25×40	1440	30×35	1510			220			25×45	1450	30×35	1500	35×30	1460
270			25×50	1580	30×40	1740	35×30	1770	270			25×50	1570	30×40	1730	35×30	1730
330			25×55	2010	30×45	1800	35×35	1980	330					30×45	1930	35×35	1960
390					30×50	2030	35×40	2070	390					30×50	2170	35×40	2170
470					30×55	2280	35×45	2380	470							35×45	2450
560							35×50	2690	560							35×50	2630

◆ **RIPPLE CURRENT MULTIPLIERS**

Frequency Multipliers

Vdc	Frequency (Hz)				
	50/60	120	300	1K	100K
200～250	0.80	1.00	1.15	1.17	1.20
400～450	0.77	1.00	1.10	1.12	1.15