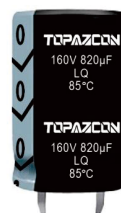


LQ Series

- Long life series
- Load life 5,000 hours at 85°C
- RoHS Compliant

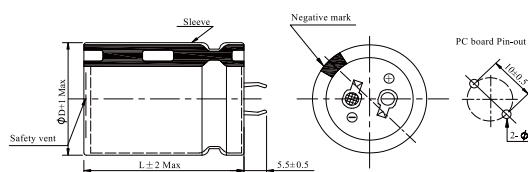


◆ SPECIFICATIONS

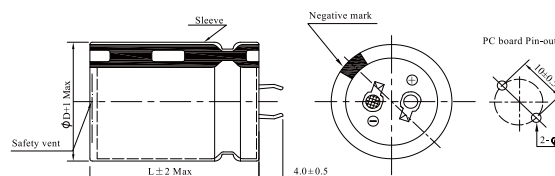
Item	Performance Characteristics		
Category Temperature Range	-25 ~ +85℃		
Working Voltage Range	160 ~ 450Vdc		
Capacitance Range	68 ~ 2,200μF		
Capacitance Tolerance	±20% (at 20℃ and 120Hz)		
Dissipation Factor (tanδ) (at 20℃, 120Hz)	Rated Voltage (V)	160 ~ 400	420 ~ 450
	tanδ(Max)	0.15	0.20
Leakage 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		
Low Temperature Characteristics Impedance Ratio(MAX)	Rated Voltage (V)	160 ~ 250	315 ~ 450
	Z(-25℃)/Z(+20℃)	4	8
Endurance	The following specifications shall be satisfied when the capacitors are restored to 20℃ after subjected to DC voltage with the rated ripple current is applied for 5,000 hours at 85℃.		
	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 : 160V 820μF)

E	L	Q	2	C	8	2	1	M	2	5	4	0	0	0	B
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Sleeve code(Black)

Lead length code

Lead forming Type code

Size code(2540 : 25×40)

Capacitance tolerance code(M: ±20%)

Capacitance code (820μF)

Voltage code(160V)

Series code(LQ)

Category code(E)

LQ Series

◆ Case size & Permissible rated ripple current: (mA rms) at 85°C / 120Hz.

Vdc ΦD μF	160								Vdc ΦD μF	180							
	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
220	22×25	1000							220								
270	22×25	1100							270	22×25	1190						
330	22×25	1300							330	22×30	1380						
390	22×30	1500	25×25	1510					390	22×30	1450	25×25	1490				
470	22×30	1650	25×25	1700					470	22×35	1680	25×30	2690	30×25	1810		
560	22×35	1910	25×30	1900	30×25	2010			560	22×40	1890	25×35	2010	30×30	2100		
680	22×40	2100	25×35	2200	30×30	2220			680	22×50	2290	25×40	2210	30×30	2310	35×25	2220
820	22×50	2480	25×40	2430	30×30	2490	35×25	2450	820			25×45	2510	30×35	2600	35×30	2660
1000			25×45	2690	30×35	2790	35×30	2710	1000			25×50	2910	30×40	2900	35×35	2940
1200			25×50	3090	30×40	3110	35×35	3050	1200					30×45	3290	35×35	3190
1500					30×45	3680	35×40	3510	1500							35×45	3600
1800							35×45	3880	1800							35×50	4110
2200							35×50	4520	2200								

Vdc ΦD μF	200								Vdc ΦD μF	220							
	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
220	22×25	1110							180	22×25	1060						
270	22×25	1210							220	22×25	1100						
330	22×30	1410	25×25	1400					270	22×30	1190	25×25	1200				
390	22×35	1590	25×30	1610					330	22×35	1400	25×30	1420	30×25	1420		
470	22×40	1780	25×35	1850	30×25	1880			390	22×40	1570	25×35	1580	30×30	1550		
560	22×45	2110	25×35	2130	30×30	2100	35×25	2050	470	22×45	1770	25×40	1790	30×30	1810		
680			25×40	2330	30×35	2400	35×30	2480	560	22×50	2120	25×45	2220	30×35	2280	35×30	2260
820			25×50	2590	30×40	2780	35×30	2590	680			25×50	2350	30×40	2300	35×30	2360
1000					30×45	3060	35×35	2800	820					30×45	2810	35×35	2790
1200					30×50	3410	35×40	3180	1000					30×50	3120	35×40	3290
1500							35×50	3800	1200							35×45	3400
1800									1500							35×50	3860

Vdc ΦD μF	250								Vdc ΦD μF	315							
	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	940							100	22×25	790						
220	22×30	1090	25×25	1100					120	22×30	900						
270	22×35	1190	25×30	1210					150	22×30	1060	25×25	1000				
330	22×40	1380	25×30	1390	30×25	1480			180	22×35	1290	25×30	1320				
390	22×45	1610	25×35	1600	30×30	1630			220	22×40	1410	25×35	1450	30×25	1280		
470	22×50	1790	25×40	1780	30×30	1810			270	22×45	1680	25×40	1620	30×30	1550	35×25	1430
560			25×45	2010	30×35	2100			330			25×45	1940	30×35	1980	35×30	1910
680					30×40	2250	35×35	2390	390			25×50	2110	30×40	2150	35×30	1950
820					30×45	2610	35×40	2590	470					30×45	2380	35×35	2460
1000							35×45	2870	560					30×50	2630	35×40	2690
1200							35×50	3320	680							35×45	3050

LQ Series

◆ Case size & Permissible rated ripple current: (mA rms) at 85°C / 120Hz.

Vdc ΦD μF	350								Vdc ΦD μF	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
82	22×25	640							68	22×25	650						
100	22×25	860							82	22×25	840						
120	22×30	1040	25×25	900					100	22×30	990	25×25	990				
150	22×35	1200	25×30	1220					120	22×35	1090	25×30	1130				
180	22×40	1340	25×30	1370					150	22×40	1240	25×30	1270	30×25	1200		
220	22×45	1470	25×35	1530	30×30	1540	35×25	1290	180	22×45	1410	25×35	1440	30×30	1520	35×25	1160
270			25×45	1730	30×35	1800	35×30	1490	220	22×50	1580	25×40	1640	30×35	1660	35×30	1470
330			25×50	1970	30×40	2030	35×30	1800	270			25×45	1790	30×40	1820	35×30	1630
390					30×40	2230	35×35	2300	330					30×45	2050	35×35	2050
470					30×45	2530	35×40	2550	390					30×50	2260	35×40	2280
560							35×45	2750	470							35×45	2540
680							35×50	3150	560							35×50	2850

Vdc ΦD μF	420								Vdc ΦD μF	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
68									68	22×30	710						
82	22×25	850	25×20	850					82	22×35	860						
100	22×30	970	25×25	980					100	22×35	950	25×30	970				
120	22×35	1070	25×30	1080					120	22×40	1070	25×35	1090				
150	22×40	1210	25×35	1250					150	22×45	1230	25×40	1250	30×30	1250		
180	22×45	1420	25×35	1420	30×30	1420	35×25	1420	180	22×50	1400	25×45	1400	30×35	1400	35×25	1350
220	22×50	1560	25×40	1580	30×30	1580	35×25	1580	220			25×50	1590	30×40	1580	35×30	1580
270			25×45	1900	30×35	1900	35×30	1940	270					30×45	1880	35×35	1890
330					30×40	2170	35×35	2170	330					30×50	2120	35×40	2150
390					30×45	2220	35×40	2220	390							35×45	2350
470							35×45	2680	470							35×50	2650
560							35×50	2930	560							35×50	2880

◆ RIPPLE CURRENT MULTIPLIERS

Frequency Multipliers

V _{dc}	Frequency (Hz)			
	120	1K	10K	100K
160 ~ 250	1.00	1.32	1.45	1.50
315 ~ 450	1.00	1.30	1.41	1.43