

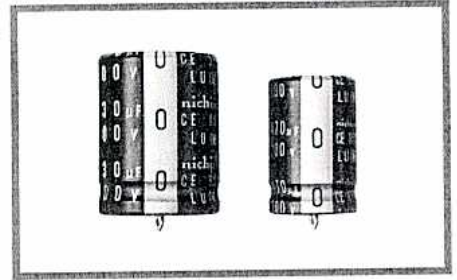
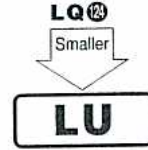
LU

Snap-in Terminal Type, Small-Sized series



Approved by Reliability Center for Electronic Component, Japan-Certification No. RCJ-03-25D

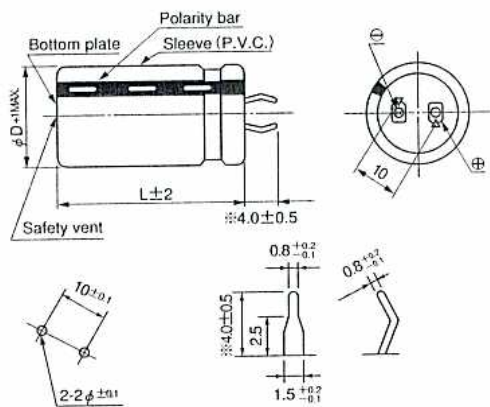
- Withstanding 3000hours application of ripple current at 85°C.
- One rank smaller case sized than standard LQ series.
- Higher production efficiency due to 4.0mm long terminal.



Specifications

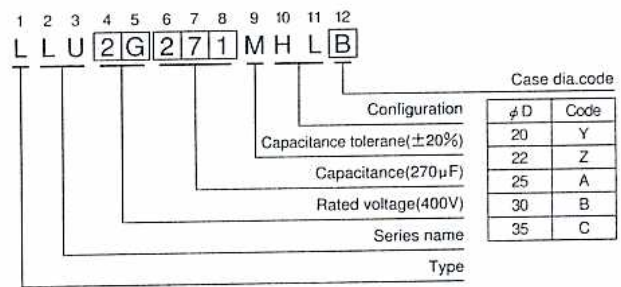
Item	Performance Characteristics		
Operating Temperature Range	-40~+85°C (160~250V), -25~+85°C (400~450V)		
Voltage Range	160~450V		
Capacitance Range	56~2700 μ F		
Capacitance Tolerance	±20% at 120Hz, 20°C		
Leakage Current	$I \leq 3\sqrt{CV}$ (μ A) (After 5 minutes' application of rated voltage) [C : Capacitance (μ F) V : Voltage(V)]		
tan δ	Measurement frequency : 120Hz, Temperature : 20°C		
	Rated voltage(V)	160 180 200 250 400 450	
	tan δ (MAX.)	0.15 0.15 0.15 0.15 0.15 0.20	
Stability at Low Temperature	Measurement frequency : 120Hz		
	Rated voltage(V)	160~250 400~450	
	Impedance ratio ZT/Z20(MAX.)	Z-25°C / Z+20°C 3 8 Z-40°C / Z+20°C 12 -	
Load Life	After an application of DC voltage (in the range of rated DC voltage even after over-lapping the specified ripple current) for 3000 hours at 85°C, capacitors shall meet the characteristics requirements indicated at right.	Capacitance change	Within ±20% of initial value
		tan δ	200% or less of initial specified value
Shelf Life	After leaving capacitors under no load at 85°C for 1000 hours, they meet the requirements listed at right.	Capacitance change	Within ±15% of initial value
		tan δ	150% or less of initial specified value
Marking	Printed with white color letter on black sleeve.		
Applicable Standards	JIS C 5141 and JIS C 5102.		

Drawing



(PC board hole dimensions) (Terminal dimensions)

Type numbering system (Example : 400V 270 μ F)



※6.3±1mm length terminal is also available upon request.
Please refer to page 124 (LQ series) for schematic of dimensions.

Frequency coefficient of allowable ripple current

Frequency (Hz)	50	60	120	300	1 k	10k	50k~
160~ 250V	0.81	0.85	1.00	1.17	1.32	1.45	1.50
400~ 450V	0.77	0.82	1.00	1.16	1.30	1.41	1.43

Minimum order quantity : 50pcs.

Dimension table in next page.



Dimensions

160V (2C)					
Cap. (μF)	Size φDXL (mm)	Allowable ripple (mA)	tan δ	Leakage Current (mA)	Code
330	20×25	1220	0.15	0.68	LLU2C331MHLY
	20×30	1550	0.15	0.74	LLU2C391MHLY
390	22×25	1550	0.15	0.74	LLU2C391MHLZ
	20×35	1810	0.15	0.82	LLU2C471MHLY
470	22×30	1770	0.15	0.82	LLU2C471MHLZ
	25×25	1770	0.15	0.82	LLU2C471MHLA
560	20×40	2040	0.15	0.89	LLU2C561MHLY
	22×30	2110	0.15	0.89	LLU2C561MHLZ
	25×25	2110	0.15	0.89	LLU2C561MHLA
680	22×35	2250	0.15	0.98	LLU2C681MHLZ
	25×30	2250	0.15	0.98	LLU2C681MHLA
	30×25	2220	0.15	0.98	LLU2C681MHLB
820	22×40	2500	0.15	1.08	LLU2C821MHLZ
	25×35	2750	0.15	1.08	LLU2C821MHLA
	30×25	2500	0.15	1.08	LLU2C821MHLB
1000	22×45	2750	0.15	1.20	LLU2C102MHLZ
	25×40	2860	0.15	1.20	LLU2C102MHLA
	30×30	2900	0.15	1.20	LLU2C102MHLB
	35×25	2900	0.15	1.20	LLU2C102MHLC
	25×45	3270	0.15	1.31	LLU2C122MHLA
1200	30×35	3300	0.15	1.31	LLU2C122MHLB
	35×25	3100	0.15	1.31	LLU2C122MHLC
	25×50	3600	0.15	1.46	LLU2C152MHLA
1500	30×40	3770	0.15	1.46	LLU2C152MHLB
	35×30	3600	0.15	1.46	LLU2C152MHLC
	30×45	4200	0.15	1.60	LLU2C182MHLB
1800	35×35	4100	0.15	1.60	LLU2C182MHLC
	30×50	4700	0.15	1.77	LLU2C222MHLB
2200	35×40	4700	0.15	1.77	LLU2C222MHLC
	2700	35×45	4780	0.15	1.97

180V (2Z)					
Cap. (μF)	Size φDXL (mm)	Allowable ripple (mA)	tan δ	Leakage Current (mA)	Code
270	20×25	1230	0.15	0.66	LLU2Z271MHLY
	20×30	1770	0.15	0.73	LLU2Z331MHLY
330	22×25	1420	0.15	0.73	LLU2Z331MHLZ
	20×30	1840	0.15	0.79	LLU2Z391MHLY
390	22×25	1840	0.15	0.79	LLU2Z391MHLZ
	20×35	1910	0.15	0.87	LLU2Z471MHLY
470	22×30	1910	0.15	0.87	LLU2Z471MHLZ
	25×25	2080	0.15	0.87	LLU2Z471MHLA
	20×40	2150	0.15	0.95	LLU2Z561MHLY
560	22×35	2250	0.15	0.95	LLU2Z561MHLZ
	25×30	2250	0.15	0.95	LLU2Z561MHLA
	22×40	2500	0.15	1.04	LLU2Z681MHLZ
680	25×30	2500	0.15	1.04	LLU2Z681MHLA
	30×25	2460	0.15	1.04	LLU2Z681MHLB
	22×45	2750	0.15	1.15	LLU2Z821MHLZ
820	25×35	2750	0.15	1.15	LLU2Z821MHLA
	30×30	2750	0.15	1.15	LLU2Z821MHLB
	35×25	2600	0.15	1.15	LLU2Z821MHLC
1000	22×50	2800	0.15	1.27	LLU2Z102MHLZ
	25×40	2860	0.15	1.27	LLU2Z102MHLA
	30×35	3000	0.15	1.27	LLU2Z102MHLB
	35×25	2800	0.15	1.27	LLU2Z102MHLC
1200	25×50	3460	0.15	1.39	LLU2Z122MHLA
	30×35	3380	0.15	1.39	LLU2Z122MHLB
	35×30	3320	0.15	1.39	LLU2Z122MHLC
1500	30×45	3900	0.15	1.55	LLU2Z152MHLB
	35×35	3830	0.15	1.55	LLU2Z152MHLC
1800	30×50	4330	0.15	1.70	LLU2Z182MHLB
	35×40	4320	0.15	1.70	LLU2Z182MHLC
2200	35×45	4800	0.15	1.88	LLU2Z222MHLC
2700	35×50	5050	0.15	2.09	LLU2Z272MHLC

200V (2D)					
Cap. (μF)	Size φDXL (mm)	Allowable ripple (mA)	tan δ	Leakage Current (mA)	Code
220	20×25	1130	0.15	0.62	LLU2D221MHLY
	20×30	1320	0.15	0.69	LLU2D271MHLY
270	22×25	1300	0.15	0.69	LLU2D271MHLZ
	20×30	1490	0.15	0.77	LLU2D331MHLY
330	22×25	1440	0.15	0.77	LLU2D331MHLZ
	20×35	1660	0.15	0.83	LLU2D391MHLY
390	22×30	1650	0.15	0.83	LLU2D391MHLZ
	25×25	1630	0.15	0.83	LLU2D391MHLA
	20×40	1930	0.15	0.91	LLU2D471MHLY
470	22×35	1900	0.15	0.91	LLU2D471MHLZ
	25×30	1860	0.15	0.91	LLU2D471MHLA
	22×35	1960	0.15	1.00	LLU2D561MHLZ
560	25×30	2050	0.15	1.00	LLU2D561MHLA
	30×25	2100	0.15	1.00	LLU2D561MHLB
	22×40	2430	0.15	1.10	LLU2D681MHLZ
680	25×35	2680	0.15	1.10	LLU2D681MHLA
	30×30	2680	0.15	1.10	LLU2D681MHLB
	22×50	2800	0.15	1.21	LLU2D821MHLZ
820	25×40	2800	0.15	1.21	LLU2D821MHLA
	30×30	2800	0.15	1.21	LLU2D821MHLB
	35×25	2930	0.15	1.21	LLU2D821MHLC
	25×45	3120	0.15	1.34	LLU2D102MHLA
1000	30×35	3000	0.15	1.34	LLU2D102MHLB
	35×30	3250	0.15	1.34	LLU2D102MHLC
	25×50	3440	0.15	1.46	LLU2D122MHLA
1200	30×40	3440	0.15	1.46	LLU2D122MHLB
	35×30	3400	0.15	1.46	LLU2D122MHLC
	30×45	3500	0.15	1.64	LLU2D152MHLB
1500	35×35	3500	0.15	1.64	LLU2D152MHLC
	1800	35×40	3870	0.15	1.80
2200	35×50	5000	0.15	1.98	LLU2D222MHLC

250V (2E)					
Cap. (μF)	Size φDXL (mm)	Allowable ripple (mA)	tan δ	Leakage Current (mA)	Code
180	20×25	1140	0.15	0.63	LLU2E181MHLY
	20×30	1200	0.15	0.70	LLU2E221MHLY
220	22×25	1200	0.15	0.70	LLU2E221MHLZ
	20×30	1350	0.15	0.77	LLU2E271MHLY
270	22×30	1430	0.15	0.77	LLU2E271MHLZ
	25×25	1400	0.15	0.77	LLU2E271MHLA
	20×35	1600	0.15	0.86	LLU2E331MHLY
330	22×30	1580	0.15	0.86	LLU2E331MHLZ
	25×25	1550	0.15	0.86	LLU2E331MHLA
	20×40	1860	0.15	0.93	LLU2E391MHLY
390	22×35	1810	0.15	0.93	LLU2E391MHLZ
	25×30	1870	0.15	0.93	LLU2E391MHLA
	30×25	1800	0.15	0.93	LLU2E391MHLB
	22×40	2080	0.15	1.02	LLU2E471MHLZ
470	25×35	2050	0.15	1.02	LLU2E471MHLA
	30×25	2040	0.15	1.02	LLU2E471MHLB
	22×45	2360	0.15	1.12	LLU2E561MHLZ
560	25×35	2240	0.15	1.12	LLU2E561MHLA
	30×30	2240	0.15	1.12	LLU2E561MHLB
	35×25	2300	0.15	1.12	LLU2E561MHLC
	25×40	2540	0.15	1.23	LLU2E681MHLA
680	30×35	2600	0.15	1.23	LLU2E681MHLB
	35×25	2620	0.15	1.23	LLU2E681MHLC
	25×50	2870	0.15	1.35	LLU2E821MHLA
820	30×35	2850	0.15	1.35	LLU2E821MHLB
	35×30	2820	0.15	1.35	LLU2E821MHLC
	30×45	3390	0.15	1.50	LLU2E102MHLB
1000	35×35	3340	0.15	1.50	LLU2E102MHLC
	30×50	3800	0.15	1.64	LLU2E122MHLB
1200	35×40	3770	0.15	1.64	LLU2E122MHLC
	1500	35×45	4190	0.15	1.83
1800	35×50	4310	0.15	2.01	LLU2E182MHLC

Allowable Ripple (mA rms) at 85°C 120Hz

■ Dimensions

400V (2G)					
Cap. (μ F)	Size ϕ D \times L (mm)	Allowable ripple (mA)	$\tan \delta$	Leakage Current (mA)	Code
68	20 \times 25	710	0.15	0.49	LLU2G680MHLY
82	20 \times 30	780	0.15	0.54	LLU2G820MHLY
	22 \times 25	800	0.15	0.54	LLU2G820MHLZ
100	20 \times 30	900	0.15	0.60	LLU2G101MHLY
	22 \times 25	850	0.15	0.60	LLU2G101MHLZ
120	20 \times 35	1020	0.15	0.65	LLU2G121MHLY
	22 \times 30	1040	0.15	0.65	LLU2G121MHLZ
	25 \times 25	1080	0.15	0.65	LLU2G121MHLA
150	20 \times 40	1170	0.15	0.73	LLU2G151MHLY
	22 \times 35	1200	0.15	0.73	LLU2G151MHLZ
	25 \times 30	1210	0.15	0.73	LLU2G151MHLA
180	22 \times 40	1380	0.15	0.80	LLU2G181MHLY
	25 \times 30	1250	0.15	0.80	LLU2G181MHLA
	30 \times 25	1450	0.15	0.80	LLU2G181MHLB
220	22 \times 45	1550	0.15	0.88	LLU2G221MHLZ
	25 \times 35	1560	0.15	0.88	LLU2G221MHLA
	30 \times 30	1610	0.15	0.88	LLU2G221MHLB
	35 \times 25	1500	0.15	0.88	LLU2G221MHLC
270	25 \times 40	1700	0.15	0.98	LLU2G271MHLY
	30 \times 35	1730	0.15	0.98	LLU2G271MHLB
	35 \times 25	1720	0.15	0.98	LLU2G271MHLC
330	25 \times 50	1920	0.15	1.08	LLU2G331MHLY
	30 \times 40	1950	0.15	1.08	LLU2G331MHLB
	35 \times 30	1950	0.15	1.08	LLU2G331MHLC
390	30 \times 40	2150	0.15	1.18	LLU2G391MHLY
	35 \times 35	2170	0.15	1.18	LLU2G391MHLC
470	30 \times 45	2350	0.15	1.30	LLU2G471MHLB
	35 \times 35	2330	0.15	1.30	LLU2G471MHLC
560	35 \times 40	2420	0.15	1.41	LLU2G561MHLC
680	35 \times 50	3080	0.15	1.56	LLU2G681MHLC

450V (2W)					
Cap. (μ F)	Size ϕ D \times L (mm)	Allowable ripple (mA)	$\tan \delta$	Leakage Current (mA)	Code
56	20 \times 25	590	0.20	0.47	LLU2W560MHLY
68	20 \times 30	710	0.20	0.52	LLU2W680MHLY
	22 \times 25	680	0.20	0.52	LLU2W680MHLZ
82	20 \times 35	760	0.20	0.57	LLU2W820MHLY
	22 \times 30	820	0.20	0.57	LLU2W820MHLZ
	25 \times 25	720	0.20	0.57	LLU2W820MHLA
100	20 \times 35	850	0.20	0.63	LLU2W101MHLY
	22 \times 30	850	0.20	0.63	LLU2W101MHLZ
	25 \times 25	920	0.20	0.63	LLU2W101MHLA
120	20 \times 40	970	0.20	0.69	LLU2W121MHLY
	22 \times 35	1020	0.20	0.69	LLU2W121MHLZ
	25 \times 30	1040	0.20	0.69	LLU2W121MHLA
150	30 \times 25	1070	0.20	0.69	LLU2W121MHLB
	22 \times 40	1150	0.20	0.77	LLU2W151MHLZ
	25 \times 35	1210	0.20	0.77	LLU2W151MHLA
180	30 \times 25	1130	0.20	0.77	LLU2W151MHLB
	22 \times 45	1290	0.20	0.85	LLU2W181MHLZ
	25 \times 40	1380	0.20	0.85	LLU2W181MHLA
	30 \times 30	1380	0.20	0.85	LLU2W181MHLB
220	35 \times 25	1300	0.20	0.85	LLU2W181MHLC
	25 \times 45	1540	0.20	0.94	LLU2W221MHLY
	30 \times 35	1560	0.20	0.94	LLU2W221MHLB
270	35 \times 25	1430	0.20	0.94	LLU2W221MHLC
	25 \times 50	1700	0.20	1.04	LLU2W271MHLY
	30 \times 40	1800	0.20	1.04	LLU2W271MHLB
330	35 \times 30	1680	0.20	1.04	LLU2W271MHLC
	30 \times 45	2020	0.20	1.15	LLU2W331MHLB
	35 \times 35	2050	0.20	1.15	LLU2W331MHLC
390	30 \times 50	2240	0.20	1.25	LLU2W391MHLB
	35 \times 40	2270	0.20	1.25	LLU2W391MHLC
470	35 \times 45	2550	0.20	1.37	LLU2W471MHLC

Allowable Ripple (mA rms) at 85°C 120Hz