

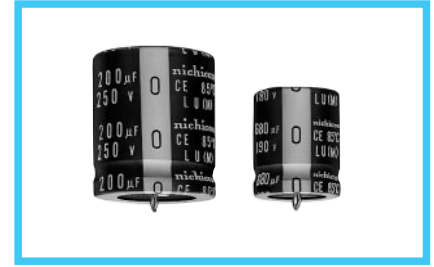
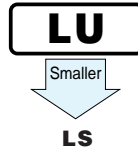
# ALUMINUM ELECTROLYTIC CAPACITORS

**LU** Snap-in Terminal Type, Standard series



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

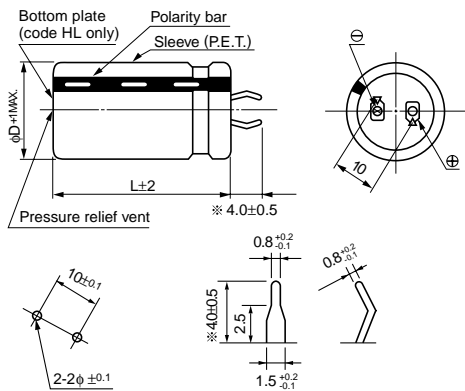
- Withstanding 3000 hours application of ripple current at 85°C.
- Higher production efficiency due to 4.0mm long terminal.



## Specifications

Item	Performance Characteristics							
Category Temperature Range	-40 ~ +85°C (160 ~ 250V), -25 ~ +85°C (400 ~ 450V)							
Rated Voltage Range	160 ~ 450V							
Rated Capacitance Range	56 ~ 2700μF							
Capacitance Tolerance	±20% at 120Hz, 20°C							
Leakage Current	I ≤ 3√CV (μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) 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 Z/-25°C/Z+20°C	3		8				
	ZT/Z20 (MAX.)	12		—				
Endurance	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 meet the characteristic requirements listed 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						Leakage current		Initial specified value or less
						Leakage current		Initial specified value or less
Marking	Printed with white color letter on black sleeve.							

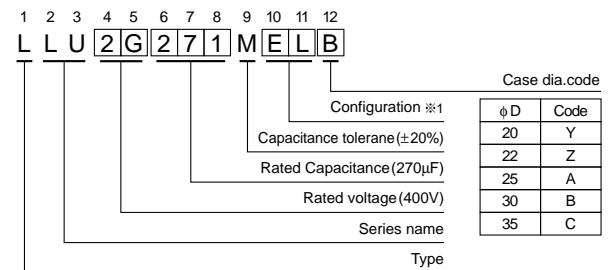
## Drawing



(PC board hole dimensions) (Terminal dimensions)

\* The other terminal is also available upon request.  
Please refer to page 197 for schematic of dimensions.

## Type numbering system ( Example : 400V 270μF)



### ※ 1 Configuration

Pb free lead finishing Pb free PET sleeve Without bottom plate	Sn-Pb lead finishing PVC sleeve contain Pb With bottom plate
EL	HL

\* Please contact to us if other configurations are required.

## Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	300	1k	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 φD × L (mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	※ Code
330	20 × 25	1220	0.15	0.68	LLU2C331MELY
390	20 × 30	1550	0.15	0.74	LLU2C391MELY
	22 × 25	1550	0.15	0.74	LLU2C391MELZ
470	20 × 35	1810	0.15	0.82	LLU2C471MELY
	22 × 30	1770	0.15	0.82	LLU2C471MELZ
	25 × 25	1770	0.15	0.82	LLU2C471MELA
560	20 × 40	2040	0.15	0.89	LLU2C561MELY
	22 × 30	2110	0.15	0.89	LLU2C561MELZ
	25 × 25	2110	0.15	0.89	LLU2C561MELA
680	22 × 35	2250	0.15	0.98	LLU2C681MELZ
	25 × 30	2250	0.15	0.98	LLU2C681MELA
	30 × 25	2220	0.15	0.98	LLU2C681MELB
820	22 × 40	2500	0.15	1.08	LLU2C821MELZ
	25 × 35	2750	0.15	1.08	LLU2C821MELA
	30 × 25	2500	0.15	1.08	LLU2C821MELB
1000	22 × 45	2750	0.15	1.20	LLU2C102MELZ
	25 × 40	2860	0.15	1.20	LLU2C102MELA
	30 × 30	2900	0.15	1.20	LLU2C102MELB
	35 × 25	2900	0.15	1.20	LLU2C102MELC
1200	25 × 45	3270	0.15	1.31	LLU2C122MELA
	30 × 35	3300	0.15	1.31	LLU2C122MELB
	35 × 25	3100	0.15	1.31	LLU2C122MELC
1500	25 × 50	3600	0.15	1.46	LLU2C152MELA
	30 × 40	3770	0.15	1.46	LLU2C152MELB
	35 × 30	3600	0.15	1.46	LLU2C152MELC
1800	30 × 45	4200	0.15	1.60	LLU2C182MELB
	35 × 35	4100	0.15	1.60	LLU2C182MELC
2200	30 × 50	4700	0.15	1.77	LLU2C222MELB
	35 × 40	4700	0.15	1.77	LLU2C222MELC
2700	35 × 45	4780	0.15	1.97	LLU2C272MELC

\* In case of Sn-Pb lead finishing · PVC sleeve contain Pb product,  
HL will be put at 10th and 11th digit of code.

180V (2Z)					
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	※ Code
270	20 × 25	1230	0.15	0.66	LLU2Z271MELY
330	20 × 30	1770	0.15	0.73	LLU2Z331MELY
	22 × 25	1420	0.15	0.73	LLU2Z331MELZ
390	20 × 30	1840	0.15	0.79	LLU2Z391MELY
	22 × 25	1840	0.15	0.79	LLU2Z391MELZ
	20 × 35	1910	0.15	0.87	LLU2Z471MELY
470	22 × 30	1910	0.15	0.87	LLU2Z471MELZ
	25 × 25	2080	0.15	0.87	LLU2Z471MELA
	20 × 40	2150	0.15	0.95	LLU2Z561MELY
560	22 × 35	2250	0.15	0.95	LLU2Z561MELZ
	25 × 30	2250	0.15	0.95	LLU2Z561MELA
	22 × 40	2500	0.15	1.04	LLU2Z681MELZ
680	25 × 30	2500	0.15	1.04	LLU2Z681MELA
	30 × 25	2460	0.15	1.04	LLU2Z681MELB
	22 × 45	2750	0.15	1.15	LLU2Z821MELZ
820	25 × 35	2750	0.15	1.15	LLU2Z821MELA
	30 × 30	2750	0.15	1.15	LLU2Z821MELB
	35 × 25	2600	0.15	1.15	LLU2Z821MELC
	22 × 50	2800	0.15	1.27	LLU2Z102MELZ
1000	25 × 40	2860	0.15	1.27	LLU2Z102MELA
	30 × 35	3000	0.15	1.27	LLU2Z102MELB
	35 × 25	2800	0.15	1.27	LLU2Z102MELC
	25 × 50	3460	0.15	1.39	LLU2Z122MELA
1200	30 × 35	3380	0.15	1.39	LLU2Z122MELB
	35 × 30	3320	0.15	1.39	LLU2Z122MELC
	30 × 45	3900	0.15	1.55	LLU2Z152MELB
1500	35 × 35	3830	0.15	1.55	LLU2Z152MELC
	30 × 50	4330	0.15	1.70	LLU2Z182MELB
1800	35 × 40	4320	0.15	1.70	LLU2Z182MELC
	35 × 45	4800	0.15	1.88	LLU2Z222MELC
2700	35 × 50	5050	0.15	2.09	LLU2Z272MELC

\* In case of Sn-Pb lead finishing · PVC sleeve contain Pb product,  
HL will be put at 10th and 11th digit of code.

200V (2D)					
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	※ Code
220	20 × 25	1130	0.15	0.62	LLU2D221MELY
270	20 × 30	1320	0.15	0.69	LLU2D271MELY
	22 × 25	1300	0.15	0.69	LLU2D271MELZ
330	20 × 30	1490	0.15	0.77	LLU2D331MELY
	22 × 25	1440	0.15	0.77	LLU2D331MELZ
390	20 × 35	1660	0.15	0.83	LLU2D391MELY
	22 × 30	1650	0.15	0.83	LLU2D391MELZ
	25 × 25	1630	0.15	0.83	LLU2D391MELA
470	20 × 40	1930	0.15	0.91	LLU2D471MELY
	22 × 35	1900	0.15	0.91	LLU2D471MELZ
	25 × 30	1860	0.15	0.91	LLU2D471MELA
560	22 × 35	1960	0.15	1.00	LLU2D561MELZ
	25 × 30	2050	0.15	1.00	LLU2D561MELA
	30 × 25	2100	0.15	1.00	LLU2D561MELB
680	22 × 40	2430	0.15	1.10	LLU2D681MELZ
	25 × 35	2680	0.15	1.10	LLU2D681MELA
	30 × 30	2680	0.15	1.10	LLU2D681MELB
820	22 × 50	2800	0.15	1.21	LLU2D821MELZ
	25 × 40	2800	0.15	1.21	LLU2D821MELA
	30 × 30	2800	0.15	1.21	LLU2D821MELB
	35 × 25	2930	0.15	1.21	LLU2D821MELC
1000	25 × 45	3120	0.15	1.34	LLU2D102MELA
	30 × 35	3000	0.15	1.34	LLU2D102MELB
	35 × 30	3250	0.15	1.34	LLU2D102MELC
1200	25 × 50	3440	0.15	1.46	LLU2D122MELA
	30 × 40	3440	0.15	1.46	LLU2D122MELB
	35 × 30	3400	0.15	1.46	LLU2D122MELC
1500	30 × 45	3500	0.15	1.64	LLU2D152MELB
	35 × 35	3500	0.15	1.64	LLU2D152MELC
1800	35 × 40	3870	0.15	1.80	LLU2D182MELC
2200	35 × 50	5000	0.15	1.98	LLU2D222MELC

\* In case of Sn-Pb lead finishing · PVC sleeve contain Pb product,  
HL will be put at 10th and 11th digit of code.

250V (2E)					
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	※ Code
180	20 × 25	1140	0.15	0.63	LLU2E181MELY
220	20 × 30	1200	0.15	0.70	LLU2E221MELY
	22 × 25	1200	0.15	0.70	LLU2E221MELZ
270	20 × 30	1350	0.15	0.77	LLU2E271MELY
	22 × 30	1430	0.15	0.77	LLU2E271MELZ
	25 × 25	1400	0.15	0.77	LLU2E271MELA
330	20 × 35	1600	0.15	0.86	LLU2E331MELY
	22 × 30	1580	0.15	0.86	LLU2E331MELZ
	25 × 25	1550	0.15	0.86	LLU2E331MELA
390	20 × 40	1860	0.15	0.93	LLU2E391MELY
	22 × 35	1810	0.15	0.93	LLU2E391MELZ
	25 × 30	1870	0.15	0.93	LLU2E391MELA
470	30 × 25	1800	0.15	0.93	LLU2E391MELB
	22 × 40	2080	0.15	1.02	LLU2E471MELZ
	25 × 35	2050	0.15	1.02	LLU2E471MELA
560	30 × 25	2040	0.15	1.02	LLU2E471MELB
	22 × 45	2360	0.15	1.12	LLU2E561MELZ
	25 × 35	2240	0.15	1.12	LLU2E561MELA
	30 × 30	2240	0.15	1.12	LLU2E561MELB
680	35 × 25	2300	0.15	1.12	LLU2E561MELC
	25 × 40	2540	0.15	1.23	LLU2E681MELA
	30 × 35	2600	0.15	1.23	LLU2E681MELB
	35 × 25	2620	0.15	1.23	LLU2E681MELC
820	25 × 50	2870	0.15	1.35	LLU2E821MELA
	30 × 35	2850	0.15	1.35	LLU2E821MELB
	35 × 30	2820	0.15	1.35	LLU2E821MELC
1000	30 × 45	3390	0.15	1.50	LLU2E102MELB
	35 × 35	3340	0.15	1.50	LLU2E102MELC
1200	30 × 50	3800	0.15	1.64	LLU2E122MELB
	35 × 40	3770	0.15	1.64	LLU2E122MELC
1500	35 × 45	4190	0.15	1.83	LLU2E152MELC
1800	35 × 50	4310	0.15	2.01	LLU2E182MELC

Rated Ripple (mA rms) at 85°C 120Hz

\* In case of Sn-Pb lead finishing · PVC sleeve contain Pb product,  
HL will be put at 10th and 11th digit of code.



## ■ Dimensions

400V (2G)					
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	※ Code
68	20 × 25	710	0.15	0.49	LLU2G680MELY
82	20 × 30	780	0.15	0.54	LLU2G820MELY
	22 × 25	800	0.15	0.54	LLU2G820MELZ
100	20 × 30	900	0.15	0.60	LLU2G101MELY
	22 × 25	850	0.15	0.60	LLU2G101MELZ
120	20 × 35	1020	0.15	0.65	LLU2G121MELY
	22 × 30	1040	0.15	0.65	LLU2G121MELZ
	25 × 25	1080	0.15	0.65	LLU2G121MELA
150	20 × 40	1170	0.15	0.73	LLU2G151MELY
	22 × 35	1200	0.15	0.73	LLU2G151MELZ
	25 × 30	1210	0.15	0.73	LLU2G151MELA
180	22 × 40	1380	0.15	0.80	LLU2G181MELZ
	25 × 30	1250	0.15	0.80	LLU2G181MELA
	30 × 25	1450	0.15	0.80	LLU2G181MELB
220	22 × 45	1550	0.15	0.88	LLU2G221MELZ
	25 × 35	1560	0.15	0.88	LLU2G221MELA
	30 × 30	1610	0.15	0.88	LLU2G221MELB
	35 × 25	1500	0.15	0.88	LLU2G221MELC
270	25 × 40	1700	0.15	0.98	LLU2G271MELA
	30 × 35	1730	0.15	0.98	LLU2G271MELB
	35 × 25	1720	0.15	0.98	LLU2G271MELC
330	25 × 50	1920	0.15	1.08	LLU2G331MELA
	30 × 40	1950	0.15	1.08	LLU2G331MELB
	35 × 30	1950	0.15	1.08	LLU2G331MELC
390	30 × 40	2150	0.15	1.18	LLU2G391MELB
	35 × 35	2170	0.15	1.18	LLU2G391MELC
470	30 × 45	2350	0.15	1.30	LLU2G471MELB
	35 × 35	2330	0.15	1.30	LLU2G471MELC
560	35 × 40	2420	0.15	1.41	LLU2G561MELC
680	35 × 50	3080	0.15	1.56	LLU2G681MELC

\* In case of Sn-Pb lead finishing · PVC sleeve contain Pb product, [H][L] will be put at 10th and 11th digit of code.

450V (2W)					
Cap. (μF)	Size φD × L (mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	※ Code
56	20 × 25	590	0.20	0.47	LLU2W560MELY
68	20 × 30	710	0.20	0.52	LLU2W680MELY
	22 × 25	680	0.20	0.52	LLU2W680MELZ
82	20 × 35	760	0.20	0.57	LLU2W820MELY
	22 × 30	820	0.20	0.57	LLU2W820MELZ
	25 × 25	720	0.20	0.57	LLU2W820MELA
100	20 × 35	850	0.20	0.63	LLU2W101MELY
	22 × 30	850	0.20	0.63	LLU2W101MELZ
	25 × 25	920	0.20	0.63	LLU2W101MELA
120	20 × 40	970	0.20	0.69	LLU2W121MELY
	22 × 35	1020	0.20	0.69	LLU2W121MELZ
	25 × 30	1040	0.20	0.69	LLU2W121MELA
150	30 × 25	1070	0.20	0.69	LLU2W121MELB
	22 × 40	1150	0.20	0.77	LLU2W151MELZ
	25 × 35	1210	0.20	0.77	LLU2W151MELA
180	30 × 25	1130	0.20	0.77	LLU2W151MELB
	22 × 45	1290	0.20	0.85	LLU2W181MELZ
	25 × 40	1380	0.20	0.85	LLU2W181MELA
220	30 × 30	1380	0.20	0.85	LLU2W181MELB
	35 × 25	1300	0.20	0.85	LLU2W181MELC
	25 × 45	1540	0.20	0.94	LLU2W221MELA
270	30 × 35	1560	0.20	0.94	LLU2W221MELB
	35 × 25	1430	0.20	0.94	LLU2W221MELC
	25 × 50	1700	0.20	1.04	LLU2W271MELA
330	30 × 40	1800	0.20	1.04	LLU2W271MELB
	35 × 30	1680	0.20	1.04	LLU2W271MELC
	30 × 45	2020	0.20	1.15	LLU2W331MELB
390	35 × 35	2050	0.20	1.15	LLU2W331MELC
	30 × 50	2240	0.20	1.25	LLU2W391MELB
470	35 × 40	2270	0.20	1.25	LLU2W391MELC
560	35 × 45	2550	0.20	1.37	LLU2W471MELC

Rated Ripple (mA rms) at 85°C 120Hz

\* In case of Sn-Pb lead finishing · PVC sleeve contain Pb product, [H][L] will be put at 10th and 11th digit of code.