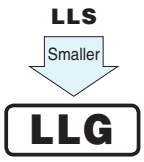
nichicon

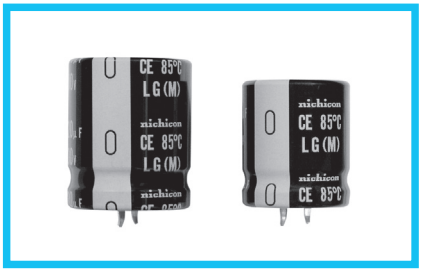
LLG

Snap-in Terminal Type, 85°C Smaller-Sized

Smaller

- One rank smaller case sized than LLS.
- Suited for equipment down sizing.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

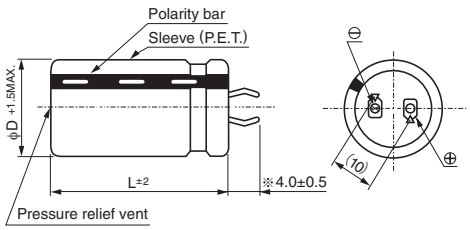


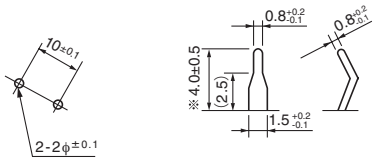


■Specifications

Item	Performance Characteristics
Category Temperature Range	– 40 to + 85°C (160 to 250V), – 25 to + 85°C (400 to 450V)
Rated Voltage Range	160 to 450V
Rated Capacitance Range	120 to 3900μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	$I \leq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) V : Voltage (V)]
Tangent of loss angle (tan δ)	Rated voltage (V): 160 to 400, 450 tan δ (MAX.): 0.15, 0.20 Measurement frequency : 120Hz at 20°C
Stability at Low Temperature	Rated voltage(V): 160 to 250, 400・450 Impedance ratio ZT/Z20 (MAX.) Z – 25°C/Z+20°C: 4, 8 Measurement frequency : 120Hz
Endurance	The specifications listed at right shall be met when the capacitors are restored to 20°C after D.C. bias plus rated ripple current is applied for 2000 hours at 85°C, the peak voltage shall not exceed the rated voltage. Capacitance change: Within ±20% of the initial capacitance value tan δ: 200% or less than the initial specified value Leakage current: Less than or equal to the initial specified value
Shelf Life	After storing the capacitors under no load at 85°C for 1000 hours and then performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they shall meet the characteristic requirements listed at right. Capacitance change: Within ±20% of the initial capacitance value tan δ: 200% or less than the initial specified value Leakage current: Less than or equal to the initial specified value
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 346 for schematic of dimensions.

Minimum order quantity : 50pcs.

● Dimension table in next page.

Type numbering system (Example : 400V 180μF)

1 2 3 4 5 6 7 8 9 10 11 12 13 14
L L G 2 G 1 8 1 M E L A 2 5

- Case length code
- Case dia.code
- Configuration
- Capacitance tolerance (±20%)
- Rated capacitance (180μF)
- Rated voltage (400V)
- Series name
- Type

φD	Code
22	Z
25	A
30	B
35	C

LLG

■Dimensions

160V (2C)				
Cap. (μF)	Size φD × L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
560	22 × 25	2250	0.89	LLG2C561MELZ25
680	22 × 30	2500	0.98	LLG2C681MELZ30
820	22 × 35	2750	1.08	LLG2C821MELZ35
	25 × 25	2520	1.08	LLG2C821MELA25
1000	22 × 40	3000	1.20	LLG2C102MELZ40
	25 × 30	3000	1.20	LLG2C102MELA30
1200	22 × 40	3050	1.31	LLG2C122MELZ40
	25 × 35	3250	1.31	LLG2C122MELA35
	30 × 25	3050	1.31	LLG2C122MELB25
1500	22 × 50	3400	1.46	LLG2C152MELZ50
	25 × 40	3400	1.46	LLG2C152MELA40
	30 × 30	3400	1.46	LLG2C152MELB30
	35 × 25	3400	1.46	LLG2C152MELC25
1800	25 × 45	3800	1.60	LLG2C182MELA45
	30 × 35	4200	1.60	LLG2C182MELB35
	35 × 30	4100	1.60	LLG2C182MELC30
2200	30 × 40	4450	1.77	LLG2C222MELB40
	35 × 35	4780	1.77	LLG2C222MELC35
2700	30 × 45	4900	1.97	LLG2C272MELB45
	35 × 40	5450	1.97	LLG2C272MELC40
3300	35 × 45	5750	2.17	LLG2C332MELC45
3900	35 × 50	6000	2.36	LLG2C392MELC50

180V (2Z)				
Cap. (μF)	Size φD × L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
560	22 × 25	1800	0.95	LLG2Z561MELZ25
680	22 × 30	1900	1.04	LLG2Z681MELZ30
	25 × 25	2100	1.04	LLG2Z681MELA25
820	22 × 35	2450	1.15	LLG2Z821MELZ35
	25 × 30	2400	1.15	LLG2Z821MELA30
1000	22 × 40	2800	1.27	LLG2Z102MELZ40
	25 × 35	2700	1.27	LLG2Z102MELA35
	30 × 25	2650	1.27	LLG2Z102MELB25
1200	22 × 45	2900	1.39	LLG2Z122MELZ45
	25 × 40	3000	1.39	LLG2Z122MELA40
	30 × 30	3000	1.39	LLG2Z122MELB30
	35 × 25	3000	1.39	LLG2Z122MELC25
1500	25 × 45	3300	1.55	LLG2Z152MELA45
	30 × 35	3300	1.55	LLG2Z152MELB35
	35 × 30	3300	1.55	LLG2Z152MELC30
1800	25 × 50	3600	1.70	LLG2Z182MELA50
	30 × 40	3600	1.70	LLG2Z182MELB40
	35 × 30	3400	1.70	LLG2Z182MELC30
2200	30 × 45	4300	1.88	LLG2Z222MELB45
	35 × 35	4300	1.88	LLG2Z222MELC35
2700	30 × 50	4700	2.09	LLG2Z272MELB50
	35 × 40	4700	2.09	LLG2Z272MELC40
3300	35 × 45	5000	2.31	LLG2Z332MELC45

200V (2D)				
Cap. (μF)	Size φD × L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
470	22 × 25	1430	0.91	LLG2D471MELZ25
560	22 × 30	2070	1.00	LLG2D561MELZ30
	25 × 25	2070	1.00	LLG2D561MELA25
680	22 × 35	2280	1.10	LLG2D681MELZ35
	25 × 30	2280	1.10	LLG2D681MELA30
820	22 × 40	2490	1.21	LLG2D821MELZ40
	25 × 30	2340	1.21	LLG2D821MELA30
1000	22 × 45	2550	1.34	LLG2D102MELZ45
	25 × 35	2550	1.34	LLG2D102MELA35
	30 × 30	2760	1.34	LLG2D102MELB30
1200	22 × 50	2810	1.46	LLG2D122MELZ50
	25 × 40	2810	1.46	LLG2D122MELA40
	30 × 30	2810	1.46	LLG2D122MELB30
	35 × 25	2810	1.46	LLG2D122MELC25
1500	25 × 50	3290	1.64	LLG2D152MELA50
	30 × 35	2980	1.64	LLG2D152MELB35
	35 × 30	3290	1.64	LLG2D152MELC30
1800	30 × 40	3320	1.80	LLG2D182MELB40
	35 × 35	3670	1.80	LLG2D182MELC35
2200	30 × 50	4180	1.98	LLG2D222MELB50
	35 × 40	4180	1.98	LLG2D222MELC40
2700	35 × 45	4340	2.20	LLG2D272MELC45
3300	35 × 50	4420	2.55	LLG2D332MELC50

250V (2E)				
Cap. (μF)	Size φD × L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
330	22 × 25	1300	0.86	LLG2E331MELZ25
390	22 × 30	1910	0.93	LLG2E391MELZ30
470	25 × 25	2000	1.02	LLG2E471MELA25
560	22 × 40	2250	1.12	LLG2E561MELZ40
	25 × 30	2250	1.12	LLG2E561MELA30
680	22 × 45	2500	1.23	LLG2E681MELZ45
	25 × 35	2500	1.23	LLG2E681MELA35
	30 × 25	2500	1.23	LLG2E681MELB25
820	25 × 40	2770	1.35	LLG2E821MELA40
	30 × 30	2770	1.35	LLG2E821MELB30
	35 × 25	2770	1.35	LLG2E821MELC25
1000	25 × 50	3320	1.50	LLG2E102MELA50
	30 × 35	3320	1.50	LLG2E102MELB35
	35 × 30	3320	1.50	LLG2E102MELC30
1200	30 × 40	3840	1.64	LLG2E122MELB40
	35 × 35	3840	1.64	LLG2E122MELC35
1500	30 × 50	4250	1.83	LLG2E152MELB50
	35 × 40	4250	1.83	LLG2E152MELC40
1800	35 × 45	4550	2.01	LLG2E182MELC45
2200	35 × 50	4750	2.22	LLG2E222MELC50

Rated ripple current (mArms) at 85°C 120Hz

LLG

■Dimensions

400V (2G)				
Cap. (μF)	Size φD × L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
150	22 × 25	1030	0.73	LLG2G151MELZ25
180	22 × 30	1160	0.80	LLG2G181MELZ30
	25 × 25	1160	0.80	LLG2G181MELA25
220	22 × 35	1400	0.88	LLG2G221MELZ35
	25 × 30	1400	0.88	LLG2G221MELA30
270	22 × 40	1500	0.98	LLG2G271MELZ40
	25 × 35	1500	0.98	LLG2G271MELA35
330	22 × 45	1700	1.08	LLG2G331MELZ45
	25 × 35	1700	1.08	LLG2G331MELA35
	30 × 30	1700	1.08	LLG2G331MELB30
390	22 × 50	1900	1.18	LLG2G391MELZ50
	25 × 40	1900	1.18	LLG2G391MELA40
	30 × 30	1900	1.18	LLG2G391MELB30
	35 × 25	1900	1.18	LLG2G391MELC25
470	25 × 50	2130	1.30	LLG2G471MELA50
	30 × 35	2130	1.30	LLG2G471MELB35
	35 × 30	2130	1.30	LLG2G471MELC30
560	30 × 40	2390	1.41	LLG2G561MELB40
	35 × 35	2390	1.41	LLG2G561MELC35
680	30 × 45	2690	1.56	LLG2G681MELB45
	35 × 35	2690	1.56	LLG2G681MELC35
820	35 × 40	2960	1.71	LLG2G821MELC40
1000	35 × 50	3300	1.89	LLG2G102MELC50

450V (2W)				
Cap. (μF)	Size φD × L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
120	22 × 25	930	0.69	LLG2W121MELZ25
150	22 × 30	1040	0.77	LLG2W151MELZ30
	25 × 25	1040	0.77	LLG2W151MELA25
180	22 × 35	1300	0.85	LLG2W181MELZ35
	25 × 30	1300	0.85	LLG2W181MELA30
220	22 × 40	1400	0.94	LLG2W221MELZ40
	25 × 35	1500	0.94	LLG2W221MELA35
	30 × 25	1400	0.94	LLG2W221MELB25
270	22 × 45	1660	1.04	LLG2W271MELZ45
	25 × 40	1800	1.04	LLG2W271MELA40
	30 × 30	1800	1.04	LLG2W271MELB30
330	25 × 45	1950	1.15	LLG2W331MELA45
	30 × 35	1950	1.15	LLG2W331MELB35
	35 × 30	1950	1.15	LLG2W331MELC30
390	25 × 50	2100	1.25	LLG2W391MELA50
	30 × 35	2100	1.25	LLG2W391MELB35
	35 × 30	2100	1.25	LLG2W391MELC30
470	30 × 40	2320	1.37	LLG2W471MELB40
	35 × 35	2320	1.37	LLG2W471MELC35
560	30 × 50	2660	1.50	LLG2W561MELB50
	35 × 40	2660	1.50	LLG2W561MELC40
680	35 × 45	2820	1.65	LLG2W681MELC45
820	35 × 50	3000	1.82	LLG2W821MELC50

Rated ripple current (mArms) at 85°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)		50	60	120	300	1k	10k	50k or more
coeff	160 to 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