ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

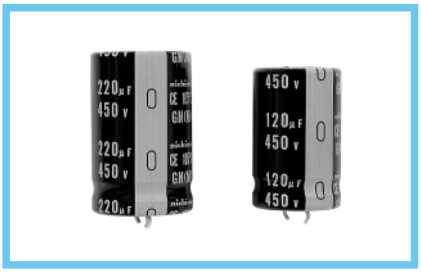
GN series

Snap-in Terminal Type, Smaller-Sized, Wide Temperature Range

Smaller

- Withstanding 2000 hours application of rated ripple current at 105°C.
- One rank smaller case sized than GU series.
- Adapted to the RoHS directive (2002/95/EC).

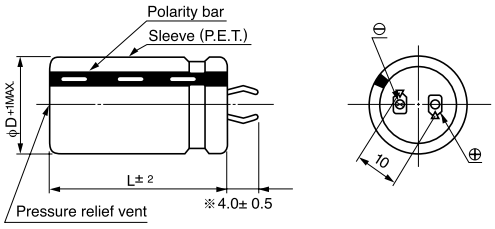
GU
Smaller
GN
Smaller
GG

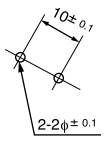


■Specifications

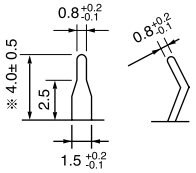
Item	Performance Characteristics
Category Temperature Range	– 40 ~ +105°C (160 ~ 250V) , – 25 ~ +105°C (350 ~ 450V)
Rated Voltage Range	160 ~ 450V
Rated Capacitance Range	56 ~ 3300μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	I ≦ 3$\sqrt{CV}$(μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) V : Voltage (V)]
tan δ	Rated voltage (V): 160 ~ 420 / 450; tan δ (MAX.): 0.15 / 0.20. Measurement frequency : 120Hz, Temperature : 20°C
Stability at Low Temperature	Rated voltage (V): 160 ~ 250 / 350 ~ 450; Impedance ratio ZT/Z20 (MAX.) Z – 25°C/Z+20°C: 4 / 8. Measurement frequency : 120Hz
Endurance	After an application of DC voltage(in the range of rated DC voltage even after over-lapping the specified ripple current) for 2000 hours at 105°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; Leakage current: Initial specified value or less
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the characteristic requirements listed at right. — Capacitance change: Within ±20% of initial value; tan δ: 200% or less of initial specified value; Leakage current: Initial specified value or less
Marking	Printed with white color letter on black sleeve.

■Drawing





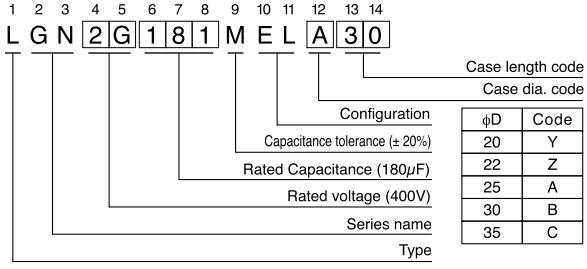
(PC board hole dimensions)



(Terminal dimensions)

※ The other terminal is also available upon request.
Please refer page 237 for schematic of dimensions.

Type numbering system (Example : 400V 180μF)



φD	Code
20	Y
22	Z
25	A
30	B
35	C

Minimum order quantity : 50pcs.

● Dimension table in next page.

GN series

■Dimensions

160V (2C)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
330	20×25	1170	0.15	0.68	LGN2C331MELY25
390	20×25	1280	0.15	0.74	LGN2C391MELY25
470	20×30	1400	0.15	0.82	LGN2C471MELY30
	22×25	1400	0.15	0.82	LGN2C471MELZ25
560	20×35	1500	0.15	0.89	LGN2C561MELY35
	22×30	1500	0.15	0.89	LGN2C561MELZ30
680	20×40	1700	0.15	0.98	LGN2C681MELY40
	22×35	1700	0.15	0.98	LGN2C681MELZ35
	25×25	1700	0.15	0.98	LGN2C681MELA25
820	22×35	2000	0.15	1.08	LGN2C821MELZ35
	25×30	2000	0.15	1.08	LGN2C821MELA30
	30×25	2000	0.15	1.08	LGN2C821MELB25
1000	22×45	2200	0.15	1.20	LGN2C102MELZ45
	25×35	2200	0.15	1.20	LGN2C102MELA35
	30×25	2200	0.15	1.20	LGN2C102MELB25
1200	25×40	2300	0.15	1.31	LGN2C122MELA40
	30×30	2300	0.15	1.31	LGN2C122MELB30
	35×25	2300	0.15	1.31	LGN2C122MELC25
1500	25×45	2500	0.15	1.46	LGN2C152MELA45
	30×35	2500	0.15	1.46	LGN2C152MELB35
	35×30	2500	0.15	1.46	LGN2C152MELC30
1800	30×40	2700	0.15	1.60	LGN2C182MELB40
	35×35	2700	0.15	1.60	LGN2C182MELC35
2200	30×45	2900	0.15	1.77	LGN2C222MELB45
	35×35	2900	0.15	1.77	LGN2C222MELC35
2700	35×45	3100	0.15	1.97	LGN2C272MELC45
3300	35×50	3300	0.15	2.17	LGN2C332MELC50

180V (2Z)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
330	20×25	1200	0.15	0.73	LGN2Z331MELY25
390	20×30	1280	0.15	0.79	LGN2Z391MELY30
	22×25	1280	0.15	0.79	LGN2Z391MELZ25
470	20×35	1380	0.15	0.87	LGN2Z471MELY35
	22×30	1380	0.15	0.87	LGN2Z471MELZ30
560	20×40	1500	0.15	0.95	LGN2Z561MELY40
	22×30	1500	0.15	0.95	LGN2Z561MELZ30
	25×25	1500	0.15	0.95	LGN2Z561MELA25
680	20×45	1700	0.15	1.04	LGN2Z681MELY45
	22×35	1700	0.15	1.04	LGN2Z681MELZ35
	25×30	1700	0.15	1.04	LGN2Z681MELA30
820	22×40	2000	0.15	1.15	LGN2Z821MELZ40
	25×35	2000	0.15	1.15	LGN2Z821MELA35
	30×25	2000	0.15	1.15	LGN2Z821MELB25
1000	25×40	2200	0.15	1.27	LGN2Z102MELA40
	30×30	2200	0.15	1.27	LGN2Z102MELB30
	35×25	2200	0.15	1.27	LGN2Z102MELC25
1200	25×45	2300	0.15	1.39	LGN2Z122MELA45
	30×35	2300	0.15	1.39	LGN2Z122MELB35
	35×30	2300	0.15	1.39	LGN2Z122MELC30
1500	25×50	2500	0.15	1.55	LGN2Z152MELA50
	30×40	2500	0.15	1.55	LGN2Z152MELB40
	35×30	2500	0.15	1.55	LGN2Z152MELC30
1800	30×45	2700	0.15	1.70	LGN2Z182MELB45
	35×35	2700	0.15	1.70	LGN2Z182MELC35
2200	30×50	2900	0.15	1.88	LGN2Z222MELB50
	35×40	2900	0.15	1.88	LGN2Z222MELC40
2700	35×50	3100	0.15	2.09	LGN2Z272MELC50

200V (2D)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
270	20×25	990	0.15	0.69	LGN2D271MELY25
330	20×30	1200	0.15	0.77	LGN2D331MELY30
	22×25	1200	0.15	0.77	LGN2D331MELZ25
390	20×30	1340	0.15	0.83	LGN2D391MELY30
	22×25	1310	0.15	0.83	LGN2D391MELZ25
470	20×35	1480	0.15	0.91	LGN2D471MELY35
	22×30	1480	0.15	0.91	LGN2D471MELZ30
	25×25	1480	0.15	0.91	LGN2D471MELA25
560	20×40	1600	0.15	1.00	LGN2D561MELY40
	22×35	1600	0.15	1.00	LGN2D561MELZ35
680	22×40	1750	0.15	1.10	LGN2D681MELZ40
	25×30	1750	0.15	1.10	LGN2D681MELA30
	30×25	1750	0.15	1.10	LGN2D681MELB25
820	22×45	2040	0.15	1.21	LGN2D821MELZ45
	25×35	2040	0.15	1.21	LGN2D821MELA35
1000	22×50	2300	0.15	1.34	LGN2D102MELZ50
	25×45	2300	0.15	1.34	LGN2D102MELA45
	30×30	2300	0.15	1.34	LGN2D102MELB30
	35×25	2300	0.15	1.34	LGN2D102MELC25
1200	25×50	2650	0.15	1.46	LGN2D122MELA50
	30×35	2650	0.15	1.46	LGN2D122MELB35
	35×30	2650	0.15	1.46	LGN2D122MELC30
1500	30×40	2800	0.15	1.64	LGN2D152MELB40
	35×35	2800	0.15	1.64	LGN2D152MELC35
1800	30×50	3080	0.15	1.80	LGN2D182MELB50
	35×40	3080	0.15	1.80	LGN2D182MELC40
2200	35×45	3480	0.15	1.98	LGN2D222MELC45

220V (2P)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
220	20×25	980	0.15	0.66	LGN2P221MELY25
270	20×30	1080	0.15	0.73	LGN2P271MELY30
	22×25	1080	0.15	0.73	LGN2P271MELZ25
330	20×35	1260	0.15	0.80	LGN2P331MELY35
	22×25	1260	0.15	0.80	LGN2P331MELZ25
390	20×35	1340	0.15	0.87	LGN2P391MELY35
	22×30	1340	0.15	0.87	LGN2P391MELZ30
	25×25	1340	0.15	0.87	LGN2P391MELA25
470	20×45	1480	0.15	0.96	LGN2P471MELY45
	22×35	1480	0.15	0.96	LGN2P471MELZ35
560	22×40	1610	0.15	1.05	LGN2P561MELZ40
	25×35	1610	0.15	1.05	LGN2P561MELA35
	30×25	1610	0.15	1.05	LGN2P561MELB25
680	22×45	1780	0.15	1.16	LGN2P681MELZ45
	25×35	1780	0.15	1.16	LGN2P681MELA35
	30×30	1780	0.15	1.16	LGN2P681MELB30
820	22×50	1930	0.15	1.27	LGN2P821MELZ50
	25×40	1930	0.15	1.27	LGN2P821MELA40
	30×35	1930	0.15	1.27	LGN2P821MELB35
	35×25	1930	0.15	1.27	LGN2P821MELC25
1000	25×50	2330	0.15	1.40	LGN2P102MELA50
	30×35	2330	0.15	1.40	LGN2P102MELB35
	35×30	2330	0.15	1.40	LGN2P102MELC30
1200	30×40	2500	0.15	1.54	LGN2P122MELB40
	35×35	2500	0.15	1.54	LGN2P122MELC35
1500	30×50	2760	0.15	1.72	LGN2P152MELB50
	35×40	2760	0.15	1.72	LGN2P152MELC40
1800	35×50	3110	0.15	1.88	LGN2P182MELC50

Rated Ripple (mArms) at 105°C 120Hz

GN series

■Dimensions

250V (2E)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
220	22×25	1000	0.15	0.70	LGN2E221MELZ25
270	22×25	1100	0.15	0.77	LGN2E271MELZ25
330	20×35	1200	0.15	0.86	LGN2E331MELY35
	22×30	1200	0.15	0.86	LGN2E331MELZ30
	25×25	1200	0.15	0.86	LGN2E331MELA25
390	20×40	1300	0.15	0.93	LGN2E391MELY40
	22×35	1300	0.15	0.93	LGN2E391MELZ35
	25×30	1300	0.15	0.93	LGN2E391MELA30
470	22×40	1400	0.15	1.02	LGN2E471MELZ40
	25×35	1400	0.15	1.02	LGN2E471MELA35
	30×25	1400	0.15	1.02	LGN2E471MELB25
560	22×45	1500	0.15	1.12	LGN2E561MELZ45
	25×35	1500	0.15	1.12	LGN2E561MELA35
	30×30	1500	0.15	1.12	LGN2E561MELB30
680	22×50	1700	0.15	1.23	LGN2E681MELZ50
	25×40	1700	0.15	1.23	LGN2E681MELA40
	30×30	1700	0.15	1.23	LGN2E681MELB30
	35×25	1700	0.15	1.23	LGN2E681MELC25
820	25×45	2000	0.15	1.35	LGN2E821MELA45
	30×35	2000	0.15	1.35	LGN2E821MELB35
	35×30	2000	0.15	1.35	LGN2E821MELC30
1000	30×40	2200	0.15	1.50	LGN2E102MELB40
	35×35	2200	0.15	1.50	LGN2E102MELC35
1200	30×45	2300	0.15	1.64	LGN2E122MELB45
	35×40	2300	0.15	1.64	LGN2E122MELC40
1500	35×45	2500	0.15	1.83	LGN2E152MELC45
1800	35×50	2700	0.15	2.01	LGN2E182MELC50

350V (2V)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
120	22×25	750	0.15	0.61	LGN2V121MELZ25
150	22×30	820	0.15	0.68	LGN2V151MELZ30
180	22×30	900	0.15	0.75	LGN2V181MELZ30
	25×25	900	0.15	0.75	LGN2V181MELA25
220	22×35	1000	0.15	0.83	LGN2V221MELZ35
	25×30	1000	0.15	0.83	LGN2V221MELA30
270	22×40	1100	0.15	0.92	LGN2V271MELZ40
	25×35	1100	0.15	0.92	LGN2V271MELA35
	30×25	1100	0.15	0.92	LGN2V271MELB25
330	22×45	1200	0.15	1.01	LGN2V331MELZ45
	25×40	1200	0.15	1.01	LGN2V331MELA40
	30×30	1200	0.15	1.01	LGN2V331MELB30
390	25×45	1300	0.15	1.10	LGN2V391MELA45
	30×35	1300	0.15	1.10	LGN2V391MELB35
470	25×50	1400	0.15	1.21	LGN2V471MELA50
	30×40	1400	0.15	1.21	LGN2V471MELB40
	35×30	1400	0.15	1.21	LGN2V471MELC30
560	30×45	1500	0.15	1.32	LGN2V561MELB45
	35×35	1500	0.15	1.32	LGN2V561MELC35
680	30×50	1700	0.15	1.46	LGN2V681MELB50
	35×40	1700	0.15	1.46	LGN2V681MELC40
820	35×45	1900	0.15	1.60	LGN2V821MELC45

400V (2G)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
68	20×25	490	0.15	0.49	LGN2G680MELY25
82	20×30	640	0.15	0.54	LGN2G820MELY30
100	20×30	680	0.15	0.60	LGN2G101MELY30
	22×25	680	0.15	0.60	LGN2G101MELZ25
120	20×35	730	0.15	0.65	LGN2G121MELY35
	22×30	730	0.15	0.65	LGN2G121MELZ30
150	20×40	850	0.15	0.73	LGN2G151MELY40
	22×35	850	0.15	0.73	LGN2G151MELZ35
180	22×35	950	0.15	0.80	LGN2G181MELZ35
	25×30	950	0.15	0.80	LGN2G181MELA30
	30×25	950	0.15	0.80	LGN2G181MELB25
220	22×45	1100	0.15	0.88	LGN2G221MELZ45
	25×35	1100	0.15	0.88	LGN2G221MELA35
	30×25	1100	0.15	0.88	LGN2G221MELB25
270	22×50	1220	0.15	0.98	LGN2G271MELZ50
	25×40	1220	0.15	0.98	LGN2G271MELA40
	30×30	1220	0.15	0.98	LGN2G271MELB30
	35×25	1220	0.15	0.98	LGN2G271MELC25
330	25×45	1440	0.15	1.08	LGN2G331MELA45
	30×35	1440	0.15	1.08	LGN2G331MELB35
390	25×50	1550	0.15	1.18	LGN2G391MELA50
	30×40	1550	0.15	1.18	LGN2G391MELB40
	35×30	1550	0.15	1.18	LGN2G391MELC30
470	30×45	1680	0.15	1.30	LGN2G471MELB45
	35×35	1680	0.15	1.30	LGN2G471MELC35
560	30×50	1900	0.15	1.41	LGN2G561MELB50
	35×40	1900	0.15	1.41	LGN2G561MELC40
680	35×45	2120	0.15	1.56	LGN2G681MELC45

420V (W6)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
68	20×25	500	0.15	0.50	LGNW6680MELY25
82	20×25	640	0.15	0.55	LGNW6820MELY25
100	20×30	660	0.15	0.61	LGNW6101MELY30
	22×25	660	0.15	0.61	LGNW6101MELZ25
120	20×35	810	0.15	0.67	LGNW6121MELY35
	22×30	810	0.15	0.67	LGNW6121MELZ30
	25×25	810	0.15	0.67	LGNW6121MELA25
150	20×40	840	0.15	0.75	LGNW6151MELY40
	22×35	840	0.15	0.75	LGNW6151MELZ35
	25×30	840	0.15	0.75	LGNW6151MELA30
180	20×45	910	0.15	0.82	LGNW6181MELY45
	22×40	910	0.15	0.82	LGNW6181MELZ40
	25×30	910	0.15	0.82	LGNW6181MELA30
	30×25	910	0.15	0.82	LGNW6181MELB25
220	22×45	1050	0.15	0.91	LGNW6221MELZ45
	25×35	1050	0.15	0.91	LGNW6221MELA35
	30×30	1050	0.15	0.91	LGNW6221MELB30
270	25×40	1250	0.15	1.01	LGNW6271MELA40
	30×30	1250	0.15	1.01	LGNW6271MELB30
	35×25	1250	0.15	1.01	LGNW6271MELC25
330	25×50	1420	0.15	1.11	LGNW6331MELA50
	30×35	1420	0.15	1.11	LGNW6331MELB35
	35×30	1420	0.15	1.11	LGNW6331MELC30
390	30×40	1610	0.15	1.21	LGNW6391MELB40
	35×35	1610	0.15	1.21	LGNW6391MELC35
470	30×45	1860	0.15	1.33	LGNW6471MELB45
	35×40	1860	0.15	1.33	LGNW6471MELC40
560	35×45	2100	0.15	1.45	LGNW6561MELC45
680	35×50	2200	0.15	1.60	LGNW6681MELC50

Rated Ripple (mArms) at 105°C 120Hz

GN series

■Dimensions

450V (2W)					
Cap.(μF)	Size φD×L(mm)	Rated ripple (mA)	tan δ	Leakage Current (mA)	Code
56	20×25	440	0.20	0.47	LGN2W560MELY25
68	20×25	500	0.20	0.52	LGN2W680MELY25
82	20×30	640	0.20	0.57	LGN2W820MELY30
	22×25	640	0.20	0.57	LGN2W820MELZ25
100	20×35	690	0.20	0.63	LGN2W101MELY35
	22×30	690	0.20	0.63	LGN2W101MELZ30
	25×25	690	0.20	0.63	LGN2W101MELA25
120	22×35	720	0.20	0.69	LGN2W121MELZ35
	25×30	720	0.20	0.69	LGN2W121MELA30
150	20×45	790	0.20	0.77	LGN2W151MELY45
	22×40	790	0.20	0.77	LGN2W151MELZ40
	25×30	790	0.20	0.77	LGN2W151MELA30
	30×25	790	0.20	0.77	LGN2W151MELB25
180	22×45	870	0.20	0.85	LGN2W181MELZ45
	25×35	870	0.20	0.85	LGN2W181MELA35
	30×30	870	0.20	0.85	LGN2W181MELB30
220	25×40	1050	0.20	0.94	LGN2W221MELA40
	30×30	1050	0.20	0.94	LGN2W221MELB30
	35×25	1050	0.20	0.94	LGN2W221MELC25
270	25×50	1230	0.20	1.04	LGN2W271MELA50
	30×35	1230	0.20	1.04	LGN2W271MELB35
	35×30	1230	0.20	1.04	LGN2W271MELC30
330	30×40	1380	0.20	1.15	LGN2W331MELB40
	35×35	1380	0.20	1.15	LGN2W331MELC35
390	30×50	1610	0.20	1.25	LGN2W391MELB50
	35×40	1610	0.20	1.25	LGN2W391MELC40
470	35×45	1780	0.20	1.37	LGN2W471MELC45
560	35×50	1990	0.20	1.50	LGN2W561MELC50

Rated Ripple (mArms) at 105°C 120Hz

●Frequency coefficient of rated ripple current

Frequency (Hz)		50	60	120	300	1k	10k	50k~
coeff	160~250V	0.81	0.85	1.00	1.17	1.32	1.45	1.50
	350~450V	0.77	0.82	1.00	1.16	1.30	1.41	1.43