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ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

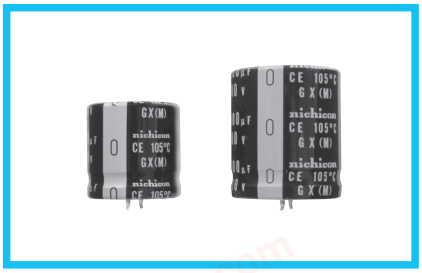
LGX

Snap-in Terminal Type,
105°C Long Life Assurance, Smaller-Sized

Smaller Long Life

- Long life assurance series withstanding 5000 hours application of rated ripple current at 105°C.
- Suited for rectifier circuit of general inverter, switching power supply.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

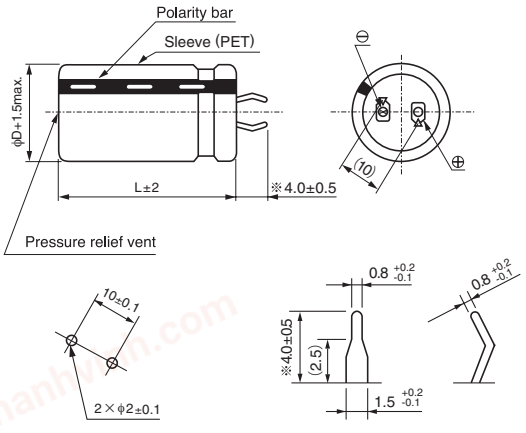
LGY
Smaller
LGX
Smaller
LGC



■Specifications

Item	Performance Characteristics
Category Temperature Range	– 25 to +105°C
Rated Voltage Range	200 to 500V
Rated Capacitance Range	56 to 2200μF
Capacitance Tolerance	±20% at 120Hz, 20°C
Leakage Current	$I \leqq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage at 20°C) [C : Rated Capacitance (μF) V : Voltage (V)]
Tangent of loss angle (tan δ)	Rated voltage(V): 200 to 400 / 450 to 500; tan δ (max.): 0.15 / 0.20. Measurement frequency : 120Hz at 20°C
Stability at Low Temperature	Rated voltage(V): 200・250 / 400 to 500; Impedance ratio (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 5000 hours at 105°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 105°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 requirements listed at right. Capacitance change: Within ±15% of the initial capacitance value; tan δ: 150% 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)

Type numbering system (Example : 400V 120μF)

1	2	3	4	5	6	7	8	9	10	11	12	13	14
L	G	X	2	G	1	2	1	M	E	L	Z	3	0

Case length code
Case dia. code
Configuration
Capacitance tolerance (±20%)
Rated capacitance (120μF)
Rated voltage (400V)
Series name
Type

φD	Code
22	Z
25	A
30	B
35	C

※ Other terminations available upon request.
Please refer to the Guidelines for Aluminum Electrolytic Capacitors.

● Dimension table in next page.

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■Dimensions

200V (2D)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
330	22 × 25	1100	0.77	LGX2D331MELZ25
390	22 × 30	1380	0.83	LGX2D391MELZ30
470	22 × 35	1550	0.91	LGX2D471MELZ35
	25 × 25	1390	0.91	LGX2D471MELA25
560	22 × 35	1550	1.00	LGX2D561MELZ35
680	22 × 40	1730	1.10	LGX2D681MELZ40
	25 × 35	1870	1.10	LGX2D681MELA35
	30 × 30	1980	1.10	LGX2D681MELB30
820	22 × 50	2180	1.21	LGX2D821MELZ50
	25 × 40	2090	1.21	LGX2D821MELA40
1000	25 × 45	2350	1.34	LGX2D102MELA45
	30 × 35	2220	1.34	LGX2D102MELB35
	35 × 30	2610	1.34	LGX2D102MELC30
1200	25 × 50	2400	1.46	LGX2D122MELA50
	30 × 40	2530	1.46	LGX2D122MELB40
	35 × 35	2880	1.46	LGX2D122MELC35
1500	30 × 50	3000	1.64	LGX2D152MELB50
	35 × 40	3080	1.64	LGX2D152MELC40
1800	35 × 45	3280	1.80	LGX2D182MELC45
2200	35 × 50	3450	1.98	LGX2D222MELC50

250V (2E)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
270	22 × 25	1010	0.77	LGX2E271MELZ25
330	22 × 30	1200	0.86	LGX2E331MELZ30
	25 × 25	1320	0.86	LGX2E331MELA25
390	22 × 35	1440	0.93	LGX2E391MELZ35
	25 × 30	1430	0.93	LGX2E391MELA30
470	22 × 40	1620	1.02	LGX2E471MELZ40
	25 × 35	1600	1.02	LGX2E471MELA35
	30 × 25	1510	1.02	LGX2E471MELB25
560	22 × 45	1800	1.12	LGX2E561MELZ45
	25 × 35	1780	1.12	LGX2E561MELA35
	30 × 30	1830	1.12	LGX2E561MELB30
680	22 × 50	2000	1.23	LGX2E681MELZ50
	25 × 40	2000	1.23	LGX2E681MELA40
	30 × 35	2060	1.23	LGX2E681MELB35
	35 × 25	1910	1.23	LGX2E681MELC25
820	25 × 45	2150	1.35	LGX2E821MELA45
	30 × 35	2060	1.35	LGX2E821MELB35
	35 × 30	2150	1.35	LGX2E821MELC30
1000	30 × 40	2330	1.50	LGX2E102MELB40
	35 × 35	2380	1.50	LGX2E102MELC35
1200	30 × 50	2680	1.64	LGX2E122MELB50
	35 × 40	2720	1.64	LGX2E122MELC40
1500	35 × 45	3050	1.83	LGX2E152MELC45
1800	35 × 50	3300	2.01	LGX2E182MELC50

400V (2G)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
100	22 × 25	660	0.60	LGX2G101MELZ25
120	22 × 30	750	0.65	LGX2G121MELZ30
150	22 × 35	860	0.73	LGX2G151MELZ35
	25 × 25	860	0.73	LGX2G151MELA25
180	22 × 35	860	0.80	LGX2G181MELZ35
	25 × 30	970	0.80	LGX2G181MELA30
	30 × 25	1020	0.80	LGX2G181MELB25
220	22 × 45	1090	0.88	LGX2G221MELZ45
	25 × 35	1120	0.88	LGX2G221MELA35
270	22 × 50	1230	0.98	LGX2G271MELZ50
	25 × 40	1260	0.98	LGX2G271MELA40
	30 × 30	1270	0.98	LGX2G271MELB30
	35 × 25	1220	0.98	LGX2G271MELC25
330	25 × 45	1300	1.08	LGX2G331MELA45
	30 × 35	1430	1.08	LGX2G331MELB35
390	25 × 50	1440	1.18	LGX2G391MELA50
	30 × 40	1600	1.18	LGX2G391MELB40
	35 × 30	1520	1.18	LGX2G391MELC30
470	30 × 45	1810	1.30	LGX2G471MELB45
	35 × 35	1670	1.30	LGX2G471MELC35
560	35 × 40	1900	1.41	LGX2G561MELC40
680	35 × 45	2120	1.56	LGX2G681MELC45

450V (2W)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
82	22 × 25	590	0.57	LGX2W820MELZ25
100	22 × 30	690	0.63	LGX2W101MELZ30
	25 × 25	700	0.63	LGX2W101MELA25
120	22 × 35	770	0.69	LGX2W121MELZ35
	25 × 30	880	0.69	LGX2W121MELA30
150	22 × 40	880	0.77	LGX2W151MELZ40
	25 × 30	880	0.77	LGX2W151MELA30
	30 × 25	930	0.77	LGX2W151MELB25
180	22 × 45	900	0.85	LGX2W181MELZ45
	25 × 35	920	0.85	LGX2W181MELA35
	30 × 30	1030	0.85	LGX2W181MELB30
	35 × 25	1100	0.85	LGX2W181MELC25
220	25 × 40	1030	0.94	LGX2W221MELA40
	30 × 35	1170	0.94	LGX2W221MELB35
	35 × 25	1100	0.94	LGX2W221MELC25
270	25 × 50	1310	1.04	LGX2W271MELA50
	30 × 40	1330	1.04	LGX2W271MELB40
	35 × 30	1240	1.04	LGX2W271MELC30
330	30 × 45	1510	1.15	LGX2W331MELB45
	35 × 35	1390	1.15	LGX2W331MELC35
390	30 × 50	1670	1.25	LGX2W391MELB50
	35 × 40	1730	1.25	LGX2W391MELC40
470	35 × 45	1830	1.37	LGX2W471MELC45
560	35 × 50	1980	1.50	LGX2W561MELC50

Rated ripple current (mArms) at 105°C 120Hz

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■Dimensions

500V (2H)				
Cap. (μF)	Size φD x L(mm)	Rated ripple (mArms)	Leakage Current (mA)	Code
56	22 × 25	560	0.50	LGX2H560MELZ25
68	22 × 30	590	0.55	LGX2H680MELZ30
	25 × 25	650	0.55	LGX2H680MELA25
82	22 × 35	720	0.60	LGX2H820MELZ35
	25 × 30	740	0.60	LGX2H820MELA30
100	22 × 40	770	0.67	LGX2H101MELZ40
120	22 × 50	930	0.73	LGX2H121MELZ50
	25 × 35	930	0.73	LGX2H121MELA35
	30 × 25	820	0.73	LGX2H121MELB25
150	25 × 45	1080	0.82	LGX2H151MELA45
	30 × 30	910	0.82	LGX2H151MELB30
	35 × 25	990	0.82	LGX2H151MELC25
180	25 × 50	1200	0.90	LGX2H181MELA50
	30 × 35	1040	0.90	LGX2H181MELB35
	35 × 30	1100	0.90	LGX2H181MELC30
220	30 × 45	1330	0.99	LGX2H221MELB45
	35 × 35	1230	0.99	LGX2H221MELC35
270	30 × 50	1500	1.10	LGX2H271MELB50
	35 × 40	1420	1.10	LGX2H271MELC40
330	35 × 45	1600	1.21	LGX2H331MELC45
390	35 × 50	1780	1.32	LGX2H391MELC50
470	35 × 58	2030	1.45	LGX2H471MELC58

Rated ripple current (mArms) at 105°C 120Hz

● Frequency coefficient of rated ripple current

Frequency (Hz)		50	60	120	300	1k	10k	50k or more
Coeff.	200・250V	0.81	0.85	1.00	1.17	1.32	1.45	1.50
	400 to 500V	0.77	0.82	1.00	1.16	1.30	1.41	1.43