

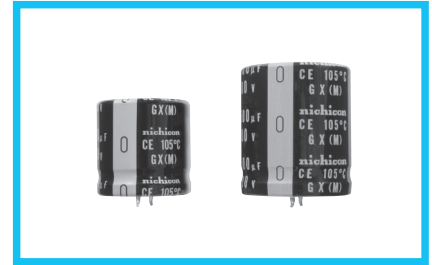
ALUMINUM ELECTROLYTIC CAPACITORS

LGX

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



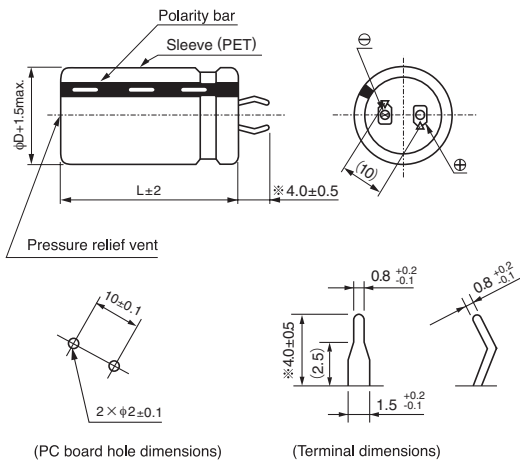
- Long life assurance series withstanding 5000 hours application of rated ripple current at 105°C.
- Suited for rectifier circuit of general inverter, switching power supply.
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).



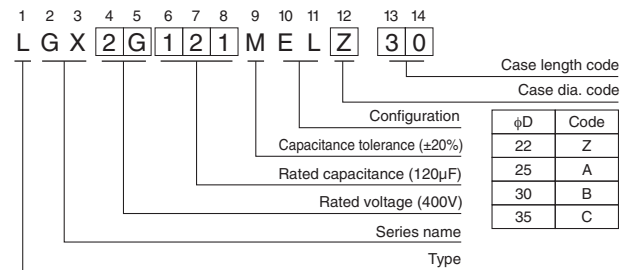
Specifications

| 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 | $I \leq 3\sqrt{CV}$ (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 | Measurement frequency : 120Hz at 20°C |
| | tan δ (max.) | 0.15 | 0.20 | |
| Stability at Low Temperature | Rated voltage(V) | 200 · 250 | 400 to 500 | Measurement frequency : 120Hz |
| | Impedance ratio (max.) | Z(-25°C) / Z(+20°C) | 4 | |
| 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



Type numbering system (Example : 400V 120μF)



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

● Dimension table in next page.



■ Dimensions

| 200V (2D) | | | | |
|-----------|-----------------|----------------------|----------------------|----------------|
| Cap. (μF) | Size φD × 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 × 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 × 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 |
| 220 | 30 × 25 | 1020 | 0.80 | LGX2G181MELB25 |
| | 22 × 45 | 1090 | 0.88 | LGX2G221MELZ45 |
| 270 | 25 × 35 | 1120 | 0.88 | LGX2G221MELA35 |
| | 22 × 50 | 1230 | 0.98 | LGX2G271MELZ50 |
| 330 | 25 × 40 | 1260 | 0.98 | LGX2G271MELA40 |
| | 30 × 30 | 1270 | 0.98 | LGX2G271MELB30 |
| | 35 × 25 | 1220 | 0.98 | LGX2G271MELC25 |
| 390 | 25 × 45 | 1300 | 1.08 | LGX2G331MELA45 |
| | 30 × 35 | 1430 | 1.08 | LGX2G331MELB35 |
| 470 | 25 × 50 | 1440 | 1.18 | LGX2G391MELA50 |
| | 30 × 40 | 1600 | 1.18 | LGX2G391MELB40 |
| | 35 × 30 | 1520 | 1.18 | LGX2G391MELC30 |
| 560 | 30 × 45 | 1810 | 1.30 | LGX2G471MELB45 |
| | 35 × 35 | 1670 | 1.30 | LGX2G471MELC35 |
| 680 | 35 × 40 | 1900 | 1.41 | LGX2G561MELC40 |
| 820 | 35 × 45 | 2120 | 1.56 | LGX2G681MELC45 |

| 450V (2W) | | | | |
|-----------|-----------------|----------------------|----------------------|----------------|
| Cap. (μF) | Size φD × 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

LGX

■ Dimensions

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

Rated ripple current (mA_{rms}) 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 |