

# ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

**GX**

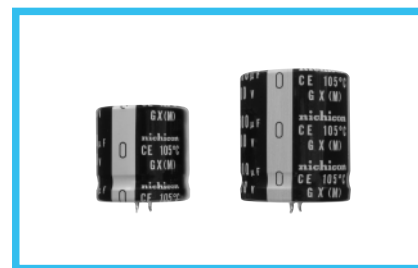
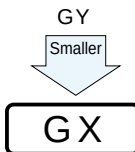
Snap-in Terminal Type,  
105°C Long Life Assurance, Smaller-Sized  
series



Smaller Long Life

Upgrade

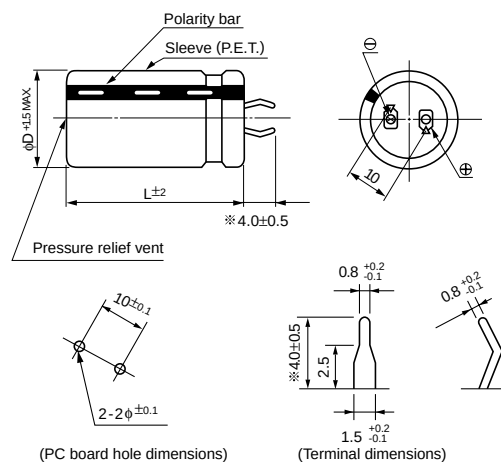
- Long life assurance series withstanding 5000 hours application of rated ripple current at 105°C.
- Suited for rectifier circuit of general inverter, switching power supply.
- Addition of 500V rated voltage.
- Compliant to the RoHS directive (2002/95/EC).



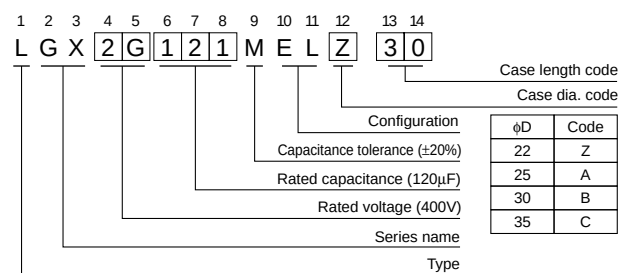
## Specifications

| 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) [C : Rated Capacitance (μF) V : Voltage (V)]                                                                                                       |               |            |                    |                                                   |            |            |              |                        |               |                                       |   |                               |
| Tangent of loss angle (tan δ) | <table><tr><td>Rated voltage(V)</td><td>200 to 400</td><td>450 to 500</td></tr><tr><td>tan δ (MAX.)</td><td>0.15</td><td>0.20</td></tr></table>                                                                             |               |            |                    | Rated voltage(V)                                  | 200 to 400 | 450 to 500 | tan δ (MAX.) | 0.15                   | 0.20          | Measurement frequency : 120Hz at 20°C |   |                               |
|                               | Rated voltage(V)                                                                                                                                                                                                            | 200 to 400    | 450 to 500 |                    |                                                   |            |            |              |                        |               |                                       |   |                               |
|                               | tan δ (MAX.)                                                                                                                                                                                                                | 0.15          | 0.20       |                    |                                                   |            |            |              |                        |               |                                       |   |                               |
|                               |                                                                                                                                                                                                                             |               |            |                    |                                                   |            |            |              |                        |               |                                       |   |                               |
| Stability at Low Temperature  | <table><tr><td colspan="2">Rated voltage(V)</td><td>200 • 250</td><td>400 to 500</td></tr><tr><td>Impedance ratio (MAX.)</td><td>Z-25°C/Z+20°C</td><td>4</td><td>8</td></tr></table>                                        |               |            |                    | Rated voltage(V)                                  |            | 200 • 250  | 400 to 500   | Impedance ratio (MAX.) | Z-25°C/Z+20°C | 4                                     | 8 | Measurement frequency : 120Hz |
|                               | Rated voltage(V)                                                                                                                                                                                                            |               | 200 • 250  | 400 to 500         |                                                   |            |            |              |                        |               |                                       |   |                               |
|                               | Impedance ratio (MAX.)                                                                                                                                                                                                      | Z-25°C/Z+20°C | 4          | 8                  |                                                   |            |            |              |                        |               |                                       |   |                               |
|                               |                                                                                                                                                                                                                             |               |            |                    |                                                   |            |            |              |                        |               |                                       |   |                               |
| 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)



\* The other terminal is also available upon request.  
Please refer page 280 for schematic of dimensions.

Minimum order quantity : 50pcs.

● Dimension table in next page.

CAT.8100B

## ■ Dimensions

| 200V (2D)    |                    |                         |                         |                |
|--------------|--------------------|-------------------------|-------------------------|----------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated<br>ripple<br>(mA) | Leakage Current<br>(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.<br>(μF) | Size<br>φD × L(mm) | Rated<br>ripple<br>(mA) | Leakage Current<br>(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 |
| 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.<br>(μF) | Size<br>φD × L(mm) | Rated<br>ripple<br>(mA) | Leakage Current<br>(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.<br>(μF) | Size<br>φD × L(mm) | Rated<br>ripple<br>(mA) | Leakage Current<br>(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 (mA<sub>rms</sub>) at 105°C 120Hz

## ■ Dimensions

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

Rated ripple current (mA<sub>rms</sub>) at 105°C 120Hz

## ● Frequency coefficient of rated ripple current

| Frequency (Hz) |                  | 50   | 60   | 120  | 300  | 1k   | 10k  | 50k or more |
|----------------|------------------|------|------|------|------|------|------|-------------|
| Coeff.         | 200 $\cdot$ 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        |

Minimum order quantity : 50pcs.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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