

# ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

Upgrade

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



- 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) | 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          |                                       | 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. (μF) | Size φD × L(mm) | Rated ripple (mA) | 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 (mA) | 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 |
| 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 (mA) | 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 × L(mm) | Rated ripple (mA) | 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 (mA<sub>rms</sub>) at 105°C 120Hz



## ■ Dimensions

| 500V (2H) |                  |                   |                      |                |
|-----------|------------------|-------------------|----------------------|----------------|
| Cap. (μF) | Size φD × L (mm) | Rated ripple (mA) | 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 (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 • 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 «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

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- Поставка более 17-ти миллионов наименований электронных компонентов;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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