# ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

## GY

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

series

Long Life

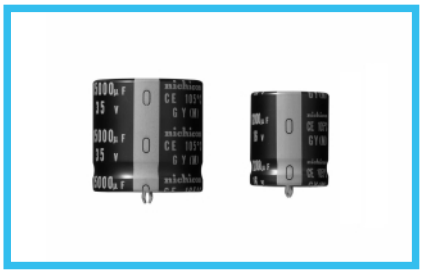
Anti-Solvent Feature

- Long life assurance series withstanding 5000 hours application of ripple current at 105°C.
- Suited for use in industrial power supplies applications where high reliability and dependable performance are the most important.
- Suited for ballast application.
- Compliant to the RoHS directive (2002/95/EC).

GR Long Life **GY** Long Life GU

Smaller

GX



## ■Specifications

| Item | Performance Characteristics |
|---|---|
| Category Temperature Range | – 40 to +105°C |
| Rated Voltage Range | 16 to 100V |
| Rated Capacitance Range | 560 to 47000μF |
| Capacitance Tolerance | ±20% at 120Hz, 20°C |
| Leakage Current | I ≦ 3√CV (μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) V : Voltage (V)] |
| Tangent of loss angle (tan δ) | Measurement frequency : 120Hz at 20°C |

| Rated voltage(V) | 16 | 25 | 35 | 50 | 63 | 80 ・ 100 |
|---|---|---|---|---|---|---|
| tan δ (MAX.) | 0.50 | 0.40 | 0.35 | 0.30 | 0.25 | 0.20 |

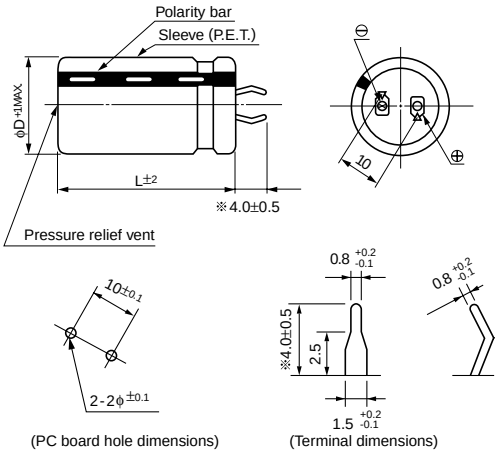
| Stability at Low Temperature | Measurement frequency : 120Hz | |
|---|---|---|
| Rated voltage(V) | | 16 to 100 |
| Impedance ratio ZT/Z20 (MAX.) | Z–25°C/Z+20°C | 4 |
| | Z–40°C/Z+20°C | 20 |

| 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 ±25% of the initial capacitance value |
| | tan δ | 250% 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)

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

## Type numbering system (Example : 100V 680μF)

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

- 13 14 : Case height code
- 12 : Case dia. code
- 11 : Configuration
- 9 10 : Capacitance tolerance (±20%)
- 6 7 8 : Rated capacitance (680 F)
- 4 5 : Rated voltage (100V)
- 1 2 3 : Series name
- 1 : Type

| φD | Code |
|---|---|
| 22 | Z |
| 25 | A |
| 30 | B |
| 35 | C |

## ●Frequency coefficient of rated ripple current

| Frequency (Hz) | 50 | 60 | 120 | 300 | 1k | 10k | 50k or more |
|---|---|---|---|---|---|---|---|
| 16 to 100V | 0.88 | 0.90 | 1.00 | 1.07 | 1.15 | 1.15 | 1.15 |

Minimum order quantity : 50pcs.

● Dimension table in next page.

# GY series

## ■Dimensions

| 16V (1C) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 6800 | 22 × 25 | 1800 | 0.98 | LGY1C682MELZ25 |
| 8200 | 22 × 30 | 2000 | 1.08 | LGY1C822MELZ30 |
| 10000 | 22 × 30 | 2200 | 1.20 | LGY1C103MELZ30 |
| | 25 × 25 | 2200 | 1.20 | LGY1C103MELA25 |
| 12000 | 22 × 35 | 2400 | 1.31 | LGY1C123MELZ35 |
| | 25 × 30 | 2400 | 1.31 | LGY1C123MELA30 |
| | 30 × 25 | 2400 | 1.31 | LGY1C123MELB25 |
| 15000 | 22 × 40 | 2700 | 1.46 | LGY1C153MELZ40 |
| | 25 × 35 | 2700 | 1.46 | LGY1C153MELA35 |
| | 30 × 30 | 2700 | 1.46 | LGY1C153MELB30 |
| 18000 | 22 × 50 | 3000 | 1.60 | LGY1C183MELZ50 |
| | 25 × 40 | 3000 | 1.60 | LGY1C183MELA40 |
| | 30 × 30 | 3000 | 1.60 | LGY1C183MELB30 |
| 22000 | 25 × 45 | 3300 | 1.77 | LGY1C223MELA45 |
| | 30 × 35 | 3300 | 1.77 | LGY1C223MELB35 |
| | 35 × 30 | 3300 | 1.77 | LGY1C223MELC30 |
| 27000 | 25 × 50 | 3600 | 1.97 | LGY1C273MELA50 |
| | 30 × 40 | 3600 | 1.97 | LGY1C273MELB40 |
| | 35 × 30 | 3600 | 1.97 | LGY1C273MELC30 |
| 33000 | 30 × 45 | 4000 | 2.17 | LGY1C333MELB45 |
| | 35 × 35 | 4000 | 2.17 | LGY1C333MELC35 |
| 39000 | 30 × 50 | 4300 | 2.36 | LGY1C393MELB50 |
| | 35 × 40 | 4300 | 2.36 | LGY1C393MELC40 |
| 47000 | 35 × 45 | 4700 | 2.60 | LGY1C473MELC45 |

| 25V (1E) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 4700 | 22 × 25 | 1600 | 1.02 | LGY1E472MELZ25 |
| 5600 | 22 × 30 | 1800 | 1.12 | LGY1E562MELZ30 |
| 6800 | 22 × 30 | 1900 | 1.23 | LGY1E682MELZ30 |
| | 25 × 25 | 1900 | 1.23 | LGY1E682MELA25 |
| 8200 | 22 × 35 | 2100 | 1.35 | LGY1E822MELZ35 |
| | 25 × 30 | 2100 | 1.35 | LGY1E822MELA30 |
| | 30 × 25 | 2100 | 1.35 | LGY1E822MELB25 |
| 10000 | 22 × 40 | 2300 | 1.50 | LGY1E103MELZ40 |
| | 25 × 35 | 2300 | 1.50 | LGY1E103MELA35 |
| | 30 × 30 | 2300 | 1.50 | LGY1E103MELB30 |
| 12000 | 22 × 45 | 2600 | 1.64 | LGY1E123MELZ45 |
| | 25 × 40 | 2600 | 1.64 | LGY1E123MELA40 |
| | 30 × 30 | 2600 | 1.64 | LGY1E123MELB30 |
| 15000 | 25 × 45 | 2900 | 1.83 | LGY1E153MELA45 |
| | 30 × 35 | 2900 | 1.83 | LGY1E153MELB35 |
| | 35 × 30 | 2900 | 1.83 | LGY1E153MELC30 |
| 18000 | 25 × 50 | 3100 | 2.01 | LGY1E183MELA50 |
| | 30 × 40 | 3100 | 2.01 | LGY1E183MELB40 |
| | 35 × 35 | 3100 | 2.01 | LGY1E183MELC35 |
| 22000 | 30 × 45 | 3500 | 2.22 | LGY1E223MELB45 |
| | 35 × 35 | 3500 | 2.22 | LGY1E223MELC35 |
| 27000 | 35 × 45 | 3800 | 2.46 | LGY1E273MELC45 |
| 33000 | 35 × 50 | 4200 | 2.72 | LGY1E333MELC50 |

| 35V (1V) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 3300 | 22 × 25 | 1500 | 1.01 | LGY1V332MELZ25 |
| 3900 | 22 × 30 | 1600 | 1.10 | LGY1V392MELZ30 |
| 4700 | 22 × 35 | 1800 | 1.21 | LGY1V472MELZ35 |
| | 25 × 25 | 1800 | 1.21 | LGY1V472MELA25 |
| 5600 | 22 × 35 | 2000 | 1.32 | LGY1V562MELZ35 |
| | 25 × 30 | 2000 | 1.32 | LGY1V562MELA30 |
| | 30 × 25 | 2000 | 1.32 | LGY1V562MELB25 |
| 6800 | 22 × 40 | 2200 | 1.46 | LGY1V682MELZ40 |
| | 25 × 35 | 2200 | 1.46 | LGY1V682MELA35 |
| | 30 × 25 | 2200 | 1.46 | LGY1V682MELB25 |
| 8200 | 22 × 50 | 2400 | 1.60 | LGY1V822MELZ50 |
| | 25 × 40 | 2400 | 1.60 | LGY1V822MELA40 |
| | 30 × 30 | 2400 | 1.60 | LGY1V822MELB30 |
| 10000 | 25 × 45 | 2600 | 1.77 | LGY1V103MELA45 |
| | 30 × 35 | 2600 | 1.77 | LGY1V103MELB35 |
| 12000 | 25 × 50 | 2900 | 1.94 | LGY1V123MELA50 |
| | 30 × 40 | 2900 | 1.94 | LGY1V123MELB40 |
| | 35 × 30 | 2900 | 1.94 | LGY1V123MELC30 |
| 15000 | 30 × 45 | 3200 | 2.17 | LGY1V153MELB45 |
| | 35 × 35 | 3200 | 2.17 | LGY1V153MELC35 |
| 18000 | 35 × 40 | 3500 | 2.38 | LGY1V183MELC40 |
| 22000 | 35 × 50 | 3900 | 2.63 | LGY1V223MELC50 |

| 50V (1H) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 1800 | 22 × 25 | 1300 | 0.90 | LGY1H182MELZ25 |
| 2200 | 22 × 25 | 1400 | 0.99 | LGY1H222MELZ25 |
| 2700 | 22 × 30 | 1600 | 1.10 | LGY1H272MELZ30 |
| | 25 × 25 | 1600 | 1.10 | LGY1H272MELA25 |
| 3300 | 22 × 35 | 1800 | 1.21 | LGY1H332MELZ35 |
| | 25 × 30 | 1800 | 1.21 | LGY1H332MELA30 |
| 3900 | 22 × 40 | 1900 | 1.32 | LGY1H392MELZ40 |
| | 25 × 30 | 1900 | 1.32 | LGY1H392MELA30 |
| | 30 × 25 | 1900 | 1.32 | LGY1H392MELB25 |
| 4700 | 22 × 45 | 2100 | 1.45 | LGY1H472MELZ45 |
| | 25 × 35 | 2100 | 1.45 | LGY1H472MELA35 |
| | 30 × 30 | 2100 | 1.45 | LGY1H472MELB30 |
| 5600 | 22 × 50 | 2300 | 1.58 | LGY1H562MELZ50 |
| | 25 × 40 | 2300 | 1.58 | LGY1H562MELA40 |
| | 30 × 30 | 2300 | 1.58 | LGY1H562MELB30 |
| 6800 | 25 × 45 | 2500 | 1.74 | LGY1H682MELA45 |
| | 30 × 35 | 2500 | 1.74 | LGY1H682MELB35 |
| | 35 × 30 | 2500 | 1.74 | LGY1H682MELC30 |
| 8200 | 30 × 40 | 2800 | 1.92 | LGY1H822MELB40 |
| | 35 × 35 | 2800 | 1.92 | LGY1H822MELC35 |
| 10000 | 30 × 50 | 3100 | 2.12 | LGY1H103MELB50 |
| | 35 × 40 | 3100 | 2.12 | LGY1H103MELC40 |
| 12000 | 35 × 45 | 3400 | 2.32 | LGY1H123MELC45 |
| 15000 | 35 × 50 | 3800 | 2.59 | LGY1H153MELC50 |

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

# GY series

## ■Dimensions

| 63V (1J) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 1200 | 22 × 25 | 1300 | 0.82 | LGY1J122MELZ25 |
| 1500 | 22 × 30 | 1500 | 0.92 | LGY1J152MELZ30 |
| | 25 × 25 | 1500 | 0.92 | LGY1J152MELA25 |
| 1800 | 22 × 30 | 1600 | 1.01 | LGY1J182MELZ30 |
| | 25 × 25 | 1600 | 1.01 | LGY1J182MELA25 |
| 2200 | 22 × 35 | 1800 | 1.11 | LGY1J222MELZ35 |
| | 25 × 30 | 1800 | 1.11 | LGY1J222MELA30 |
| 2700 | 22 × 40 | 2000 | 1.23 | LGY1J272MELZ40 |
| | 25 × 35 | 2000 | 1.23 | LGY1J272MELA35 |
| | 30 × 25 | 2000 | 1.23 | LGY1J272MELB25 |
| 3300 | 22 × 45 | 2200 | 1.36 | LGY1J332MELZ45 |
| | 25 × 35 | 2200 | 1.36 | LGY1J332MELA35 |
| | 30 × 30 | 2200 | 1.36 | LGY1J332MELB30 |
| 3900 | 25 × 40 | 2400 | 1.48 | LGY1J392MELA40 |
| | 30 × 35 | 2400 | 1.48 | LGY1J392MELB35 |
| 4700 | 25 × 50 | 2600 | 1.63 | LGY1J472MELA50 |
| | 30 × 40 | 2600 | 1.63 | LGY1J472MELB40 |
| | 35 × 30 | 2600 | 1.63 | LGY1J472MELC30 |
| 5600 | 30 × 45 | 2800 | 1.78 | LGY1J562MELB45 |
| | 35 × 35 | 2800 | 1.78 | LGY1J562MELC35 |
| 6800 | 30 × 50 | 3100 | 1.96 | LGY1J682MELB50 |
| | 35 × 40 | 3100 | 1.96 | LGY1J682MELC40 |
| 8200 | 35 × 45 | 3400 | 2.15 | LGY1J822MELC45 |
| 10000 | 35 × 50 | 3800 | 2.38 | LGY1J103MELC50 |

| 80V (1K) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 820 | 22 × 25 | 1200 | 0.76 | LGY1K821MELZ25 |
| 1000 | 22 × 25 | 1300 | 0.84 | LGY1K102MELZ25 |
| 1200 | 22 × 30 | 1500 | 0.92 | LGY1K122MELZ30 |
| | 25 × 25 | 1500 | 0.92 | LGY1K122MELA25 |
| 1500 | 22 × 35 | 1600 | 1.03 | LGY1K152MELZ35 |
| | 25 × 25 | 1600 | 1.03 | LGY1K152MELA25 |
| 1800 | 22 × 35 | 1800 | 1.13 | LGY1K182MELZ35 |
| | 25 × 30 | 1800 | 1.13 | LGY1K182MELA30 |
| | 30 × 25 | 1800 | 1.13 | LGY1K182MELB25 |
| 2200 | 22 × 45 | 2000 | 1.25 | LGY1K222MELZ45 |
| | 25 × 35 | 2000 | 1.25 | LGY1K222MELA35 |
| | 30 × 25 | 2000 | 1.25 | LGY1K222MELB25 |
| 2700 | 25 × 40 | 2200 | 1.39 | LGY1K272MELA40 |
| | 30 × 30 | 2200 | 1.39 | LGY1K272MELB30 |
| 3300 | 25 × 45 | 2400 | 1.54 | LGY1K332MELA45 |
| | 30 × 35 | 2400 | 1.54 | LGY1K332MELB35 |
| | 35 × 30 | 2400 | 1.54 | LGY1K332MELC30 |
| 3900 | 30 × 40 | 2600 | 1.67 | LGY1K392MELB40 |
| | 35 × 30 | 2600 | 1.67 | LGY1K392MELC30 |
| 4700 | 30 × 45 | 2900 | 1.83 | LGY1K472MELB45 |
| | 35 × 35 | 2900 | 1.83 | LGY1K472MELC35 |
| 5600 | 35 × 40 | 3100 | 2.00 | LGY1K562MELC40 |
| 6800 | 35 × 45 | 3500 | 2.21 | LGY1K682MELC45 |

| 100V (2A) | | | | |
|---|---|---|---|---|
| Cap. (μF) | Size φD × L(mm) | Rated ripple (mA) | Leakage Current (mA) | Code |
| 560 | 22 × 25 | 1100 | 0.70 | LGY2A561MELZ25 |
| 680 | 22 × 30 | 1200 | 0.78 | LGY2A681MELZ30 |
| 820 | 22 × 30 | 1300 | 0.85 | LGY2A821MELZ30 |
| | 25 × 25 | 1300 | 0.85 | LGY2A821MELA25 |
| 1000 | 22 × 35 | 1500 | 0.94 | LGY2A102MELZ35 |
| | 25 × 30 | 1500 | 0.94 | LGY2A102MELA30 |
| 1200 | 22 × 40 | 1600 | 1.03 | LGY2A122MELZ40 |
| | 25 × 35 | 1600 | 1.03 | LGY2A122MELA35 |
| | 30 × 25 | 1600 | 1.03 | LGY2A122MELB25 |
| 1500 | 22 × 45 | 1800 | 1.16 | LGY2A152MELZ45 |
| | 25 × 40 | 1800 | 1.16 | LGY2A152MELA40 |
| | 30 × 30 | 1800 | 1.16 | LGY2A152MELB30 |
| 1800 | 25 × 45 | 2000 | 1.27 | LGY2A182MELA45 |
| | 30 × 35 | 2000 | 1.27 | LGY2A182MELB35 |
| 2200 | 25 × 50 | 2200 | 1.40 | LGY2A222MELA50 |
| | 30 × 40 | 2200 | 1.40 | LGY2A222MELB40 |
| | 35 × 30 | 2200 | 1.40 | LGY2A222MELC30 |
| 2700 | 30 × 45 | 2400 | 1.55 | LGY2A272MELB45 |
| | 35 × 35 | 2400 | 1.55 | LGY2A272MELC35 |
| 3300 | 30 × 50 | 2700 | 1.72 | LGY2A332MELB50 |
| | 35 × 40 | 2700 | 1.72 | LGY2A332MELC40 |
| 3900 | 35 × 45 | 2900 | 1.87 | LGY2A392MELC45 |
| 4700 | 35 × 50 | 3200 | 2.05 | LGY2A472MELC50 |

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

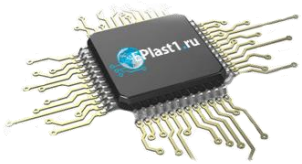
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- 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**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.