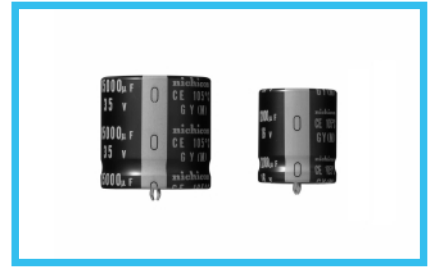


# ALUMINUM ELECTROLYTIC CAPACITORS

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



- 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).



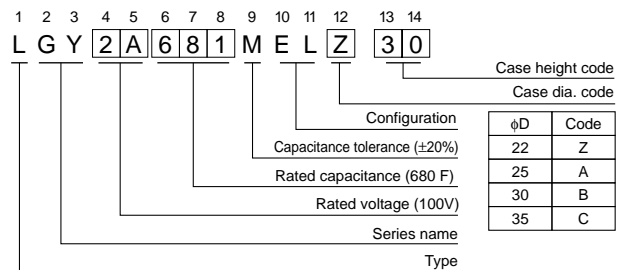
## Specifications

| 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               | $I \leq 3\sqrt{CV}$ (μA) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μF) V : Voltage (V)]   |               |      |           |      |                    |   |
| Tangent of loss angle (tan δ) | 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   | Z-25°C/Z+20°C |      | 4         |      |                    |   |
|                               | ZT/Z20 (MAX.)   | 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     |
| 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     |
| Marking                       | Printed with white color letter on black sleeve.  |               |      |           |      | Leakage current    | Less than or equal to the initial specified value |
|                               |   |               |      |           |      | Leakage current    | Less than or equal to the initial specified value |

## Drawing



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



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

## 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.

## ■ 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 |
|           | 25 × 50         | 2900              | 1.94                 | LGY1V123MELA50 |
| 12000     | 30 × 40         | 2900              | 1.94                 | LGY1V123MELB40 |
|           | 35 × 30         | 2900              | 1.94                 | LGY1V123MELC30 |
|           | 30 × 45         | 3200              | 2.17                 | LGY1V153MELB45 |
| 15000     | 35 × 35         | 3200              | 2.17                 | LGY1V153MELC35 |
|           | 18000           | 35 × 40           | 3500                 | 2.38           |
| 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 (mA<sub>rms</sub>) at 105°C 120Hz



## ■ 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](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.