

**GY**

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

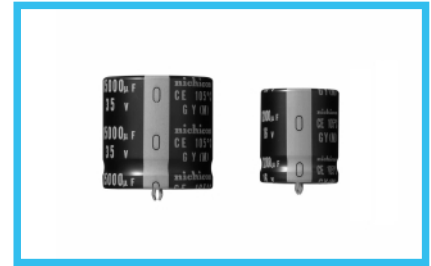
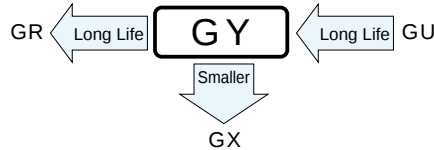


Long Life



Anti-Solvent Feature

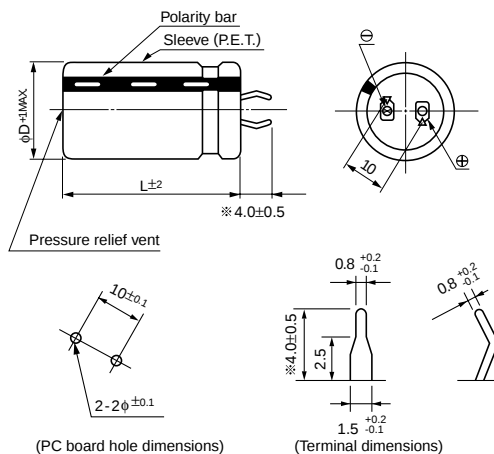
- Long life assurance series withstanding 5000 hours application of ripple current at 105°C.
- Suited for use in industrial power supplies applications where high reliability and dependable performance are the most important.
- Suited for ballast application.
- Compliant to the RoHS directive (2011/65/EU).



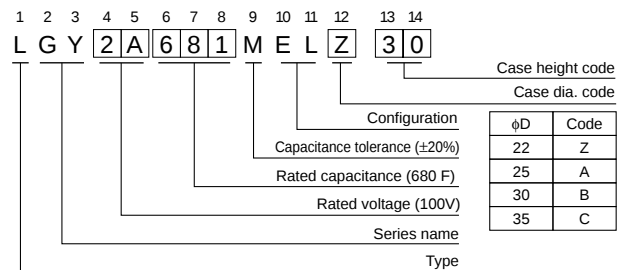
## Specifications

| 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                                                                                                                                                                                                             | 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     |
|                               |                                                                                                                                                                                                                             |               |           |      | 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 : 100V 680μF)



※ The other terminal is also available upon request.  
Please refer page 328 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.<br>( $\mu$ F) | Size<br>$\phi D \times L$ (mm) | Rated ripple<br>(mA) | Leakage Current<br>(mA) | Code           |
| 6800               | 22 $\times$ 25                 | 1800                 | 0.98                    | LGY1C682MELZ25 |
| 8200               | 22 $\times$ 30                 | 2000                 | 1.08                    | LGY1C822MELZ30 |
| 10000              | 22 $\times$ 30                 | 2200                 | 1.20                    | LGY1C103MELZ30 |
|                    | 25 $\times$ 25                 | 2200                 | 1.20                    | LGY1C103MELA25 |
| 12000              | 22 $\times$ 35                 | 2400                 | 1.31                    | LGY1C123MELZ35 |
|                    | 25 $\times$ 30                 | 2400                 | 1.31                    | LGY1C123MELA30 |
|                    | 30 $\times$ 25                 | 2400                 | 1.31                    | LGY1C123MELB25 |
| 15000              | 22 $\times$ 40                 | 2700                 | 1.46                    | LGY1C153MELZ40 |
|                    | 25 $\times$ 35                 | 2700                 | 1.46                    | LGY1C153MELA35 |
|                    | 30 $\times$ 30                 | 2700                 | 1.46                    | LGY1C153MELB30 |
| 18000              | 22 $\times$ 50                 | 3000                 | 1.60                    | LGY1C183MELZ50 |
|                    | 25 $\times$ 40                 | 3000                 | 1.60                    | LGY1C183MELA40 |
|                    | 30 $\times$ 30                 | 3000                 | 1.60                    | LGY1C183MELB30 |
| 22000              | 25 $\times$ 45                 | 3300                 | 1.77                    | LGY1C223MELA45 |
|                    | 30 $\times$ 35                 | 3300                 | 1.77                    | LGY1C223MELB35 |
|                    | 35 $\times$ 30                 | 3300                 | 1.77                    | LGY1C223MELC30 |
| 27000              | 25 $\times$ 50                 | 3600                 | 1.97                    | LGY1C273MELA50 |
|                    | 30 $\times$ 40                 | 3600                 | 1.97                    | LGY1C273MELB40 |
|                    | 35 $\times$ 30                 | 3600                 | 1.97                    | LGY1C273MELC30 |
| 33000              | 30 $\times$ 45                 | 4000                 | 2.17                    | LGY1C333MELB45 |
|                    | 35 $\times$ 35                 | 4000                 | 2.17                    | LGY1C333MELC35 |
| 39000              | 30 $\times$ 50                 | 4300                 | 2.36                    | LGY1C393MELB50 |
|                    | 35 $\times$ 40                 | 4300                 | 2.36                    | LGY1C393MELC40 |
| 47000              | 35 $\times$ 45                 | 4700                 | 2.60                    | LGY1C473MELC45 |

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

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

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

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

## ■ Dimensions

| 63V (1J)     |                    |                      |                         |                |
|--------------|--------------------|----------------------|-------------------------|----------------|
| Cap.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage Current<br>(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.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage Current<br>(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.<br>(μF) | Size<br>φD × L(mm) | Rated ripple<br>(mA) | Leakage Current<br>(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 (mA<sub>Arms</sub>) at 105°C 120Hz