

# ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

**GL**

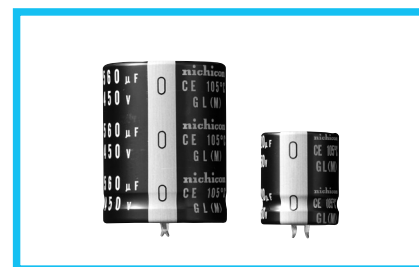
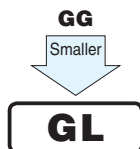
Snap-in Terminal Type, 105°C Ultra-Smaller-Sized

series



Smaller

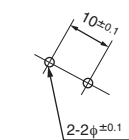
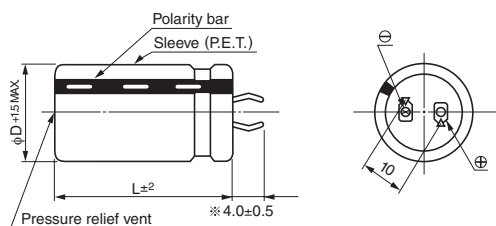
- One rank smaller case sized than GG series.
- Suited for equipment down sizing.
- Compliant to the RoHS directive (2011/65/EU).



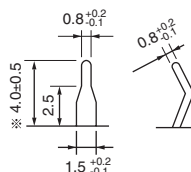
## Specifications

| Item                                  | Performance Characteristics                                                                                                                                                                                                 |                 |                    |                                                   |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|---------------------------------------------------|
| Category Temperature Range            | - 25 to +105°C                                                                                                                                                                                                              |                 |                    |                                                   |
| Rated Voltage Range                   | 400 · 450V                                                                                                                                                                                                                  |                 |                    |                                                   |
| Rated Capacitance Range               | 120 to 1000μF                                                                                                                                                                                                               |                 |                    |                                                   |
| 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)         | Rated voltage (V)                                                                                                                                                                                                           | 400             | 450                |                                                   |
|                                       | tan δ (MAX.)                                                                                                                                                                                                                | 0.15            | 0.20               |                                                   |
| Measurement frequency : 120Hz at 20°C |                                                                                                                                                                                                                             |                 |                    |                                                   |
| Stability at Low Temperature          | Rated voltage (V)                                                                                                                                                                                                           |                 | 400 · 450          |                                                   |
|                                       | Impedance ratio ZT/Z20 (MAX.)                                                                                                                                                                                               | Z - 25°C/Z+20°C | 8                  |                                                   |
| Measurement frequency : 120Hz         |                                                                                                                                                                                                                             |                 |                    |                                                   |
| 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 2000 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 characteristic requirements listed at right.         |                 | 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 |
| Marking                               | Printed with white color letter on black sleeve.                                                                                                                                                                            |                 |                    |                                                   |

## Drawing



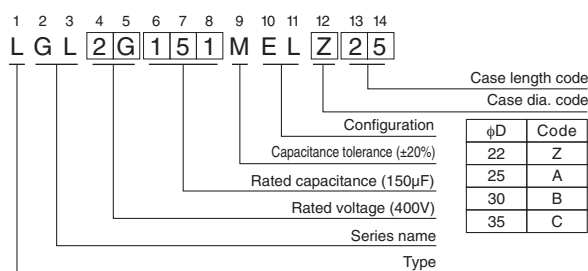
(PC board hole dimensions)



(Terminal dimensions)

※ The other terminal is also available upon request.  
Please refer page 326 for schematic of dimensions.

## Type numbering system (Example : 400V 150μF)



## Frequency coefficient of rated ripple current

| Frequency (Hz) |            | 50   | 60   | 120  | 300  | 1 k  | 10k  | 50k or more |
|----------------|------------|------|------|------|------|------|------|-------------|
| Coeff.         | 400 · 450V | 0.77 | 0.82 | 1.00 | 1.16 | 1.30 | 1.41 | 1.43        |

Minimum order quantity : 50pcs.

- Dimension table in next page.

CAT.8100D



# Dimensions

| 400V (2G)          |                                 |                      |                         |                |
|--------------------|---------------------------------|----------------------|-------------------------|----------------|
| Cap.<br>( $\mu$ F) | Size<br>$\phi$ D $\times$ L(mm) | Rated ripple<br>(mA) | Leakage Current<br>(mA) | Code           |
| 150                | 22 $\times$ 25                  | 730                  | 0.73                    | LGL2G151MELZ25 |
| 220                | 22 $\times$ 30                  | 780                  | 0.88                    | LGL2G221MELZ30 |
|                    | 25 $\times$ 25                  | 780                  | 0.88                    | LGL2G221MELA25 |
| 270                | 22 $\times$ 35                  | 910                  | 0.98                    | LGL2G271MELZ35 |
|                    | 25 $\times$ 30                  | 910                  | 0.98                    | LGL2G271MELA30 |
| 330                | 22 $\times$ 45                  | 1070                 | 1.08                    | LGL2G331MELZ45 |
|                    | 25 $\times$ 35                  | 1070                 | 1.08                    | LGL2G331MELA35 |
|                    | 30 $\times$ 25                  | 1040                 | 1.08                    | LGL2G331MELB25 |
| 390                | 22 $\times$ 50                  | 1230                 | 1.18                    | LGL2G391MELZ50 |
|                    | 25 $\times$ 40                  | 1230                 | 1.18                    | LGL2G391MELA40 |
|                    | 30 $\times$ 30                  | 1230                 | 1.18                    | LGL2G391MELB30 |
|                    | 35 $\times$ 25                  | 1180                 | 1.18                    | LGL2G391MELC25 |
| 470                | 25 $\times$ 45                  | 1500                 | 1.30                    | LGL2G471MELA45 |
|                    | 30 $\times$ 35                  | 1500                 | 1.30                    | LGL2G471MELB35 |
| 560                | 30 $\times$ 40                  | 1660                 | 1.41                    | LGL2G561MELB40 |
|                    | 35 $\times$ 30                  | 1660                 | 1.41                    | LGL2G561MELC30 |
| 680                | 30 $\times$ 45                  | 1740                 | 1.56                    | LGL2G681MELB45 |
|                    | 35 $\times$ 35                  | 1740                 | 1.56                    | LGL2G681MELC35 |
| 820                | 30 $\times$ 50                  | 1920                 | 1.71                    | LGL2G821MELB50 |
|                    | 35 $\times$ 40                  | 1920                 | 1.71                    | LGL2G821MELC40 |
| 1000               | 35 $\times$ 50                  | 2200                 | 1.89                    | LGL2G102MELC50 |

| 450V (2W)          |                                 |                      |                         |                |
|--------------------|---------------------------------|----------------------|-------------------------|----------------|
| Cap.<br>( $\mu$ F) | Size<br>$\phi$ D $\times$ L(mm) | Rated ripple<br>(mA) | Leakage Current<br>(mA) | Code           |
| 120                | 22 $\times$ 25                  | 690                  | 0.69                    | LGL2W121MELZ25 |
| 150                | 22 $\times$ 30                  | 740                  | 0.77                    | LGL2W151MELZ30 |
|                    | 25 $\times$ 25                  | 740                  | 0.77                    | LGL2W151MELA25 |
| 180                | 22 $\times$ 35                  | 770                  | 0.85                    | LGL2W181MELZ35 |
|                    | 25 $\times$ 30                  | 770                  | 0.85                    | LGL2W181MELA30 |
| 220                | 22 $\times$ 40                  | 850                  | 0.94                    | LGL2W221MELZ40 |
|                    | 25 $\times$ 35                  | 850                  | 0.94                    | LGL2W221MELA35 |
|                    | 30 $\times$ 25                  | 820                  | 0.94                    | LGL2W221MELB25 |
| 270                | 22 $\times$ 45                  | 930                  | 1.04                    | LGL2W271MELZ45 |
|                    | 25 $\times$ 40                  | 930                  | 1.04                    | LGL2W271MELA40 |
|                    | 30 $\times$ 30                  | 930                  | 1.04                    | LGL2W271MELB30 |
| 330                | 25 $\times$ 45                  | 1120                 | 1.15                    | LGL2W331MELA45 |
|                    | 30 $\times$ 35                  | 1120                 | 1.15                    | LGL2W331MELB35 |
|                    | 35 $\times$ 25                  | 1070                 | 1.15                    | LGL2W331MELC25 |
| 390                | 25 $\times$ 50                  | 1280                 | 1.25                    | LGL2W391MELA50 |
|                    | 30 $\times$ 40                  | 1280                 | 1.25                    | LGL2W391MELB40 |
|                    | 35 $\times$ 30                  | 1280                 | 1.25                    | LGL2W391MELC30 |
| 470                | 30 $\times$ 45                  | 1480                 | 1.37                    | LGL2W471MELB45 |
|                    | 35 $\times$ 35                  | 1480                 | 1.37                    | LGL2W471MELC35 |
| 560                | 30 $\times$ 50                  | 1660                 | 1.50                    | LGL2W561MELB50 |
|                    | 35 $\times$ 40                  | 1660                 | 1.50                    | LGL2W561MELC40 |
| 680                | 35 $\times$ 45                  | 1770                 | 1.65                    | LGL2W681MELC45 |
| 820                | 35 $\times$ 50                  | 1930                 | 1.82                    | LGL2W821MELC50 |

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