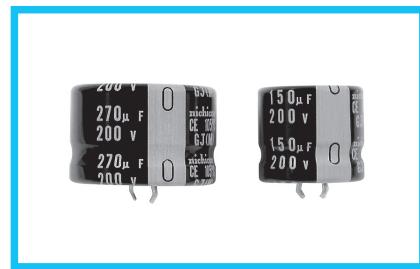


**LGJ**

Snap-in Terminal Type, 105°C Low-Profile Sized

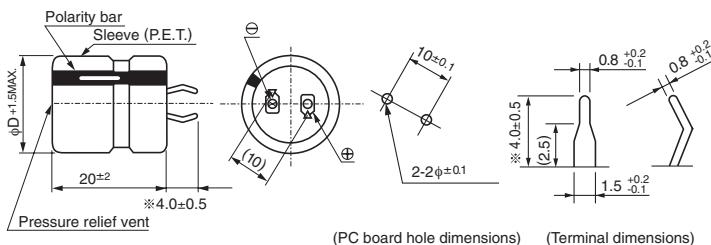


- Withstanding 3000 hours application of rated ripple current at 105°C.
- Ideally suited for flat design for switching power supply.
- Addition of 450V rated voltage.
- Compliant to the RoHS directive (2011/65/EU, (EU)2015/863).

**■ Specifications**

| Item                          | Performance Characteristics   |                                       |             |                    |  |           |   |                 |   |                 |    |   |
|-------------------------------|---|---------------------------------------|-------------|--------------------|--|-----------|---|-----------------|---|-----------------|----|---|
| Category Temperature Range    | -40 to +105°C (200 • 250V), -25 to +105°C (400 • 450V)  |                                       |             |                    |  |           |   |                 |   |                 |    |   |
| Rated Voltage Range           | 200 to 450V   |                                       |             |                    |  |           |   |                 |   |                 |    |   |
| Rated Capacitance Range       | 47 to 680μF   |                                       |             |                    |  |           |   |                 |   |                 |    |   |
| Capacitance Tolerance         | ±20% at 120Hz, 20°C   |                                       |             |                    |  |           |   |                 |   |                 |    |   |
| Leakage Current               | 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)<br>tan δ (MAX.)  | 200 to 400<br>0.15                    | 450<br>0.20 |                    |  |           |   |                 |   |                 |    |   |
|                               |   | Measurement frequency : 120Hz at 20°C |             |                    |  |           |   |                 |   |                 |    |   |
| Stability at Low Temperature  | Measurement frequency : 120Hz   |                                       |             |                    |  |           |   |                 |   |                 |    |   |
|                               | <table border="1"> <thead> <tr> <th>Rated voltage(V)</th> <th>200 • 250</th> <th>400 • 450</th> </tr> </thead> <tbody> <tr> <td>Z - 25°C/Z+20°C</td> <td>3</td> <td>8</td> </tr> <tr> <td>Z - 40°C/Z+20°C</td> <td>12</td> <td>—</td> </tr> </tbody> </table>   |                                       |             | Rated voltage(V)   | 200 • 250                                    | 400 • 450 | Z - 25°C/Z+20°C                               | 3               | 8   | Z - 40°C/Z+20°C | 12 | — |
| Rated voltage(V)              | 200 • 250   | 400 • 450                             |             |                    |  |           |   |                 |   |                 |    |   |
| Z - 25°C/Z+20°C               | 3   | 8                                     |             |                    |  |           |   |                 |   |                 |    |   |
| Z - 40°C/Z+20°C               | 12  | —                                     |             |                    |  |           |   |                 |   |                 |    |   |
| Endurance                     | <p>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 3000 hours at 105°C, the peak voltage shall not exceed the rated voltage.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±20% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>200% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table> |                                       |             | 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 |                 |    |   |
| 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                    | <p>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.</p> <table border="1"> <tr> <td>Capacitance change</td> <td>Within ±15% of the initial capacitance value</td> </tr> <tr> <td>tan δ</td> <td>150% or less than the initial specified value</td> </tr> <tr> <td>Leakage current</td> <td>Less than or equal to the initial specified value</td> </tr> </table>                        |                                       |             | 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 |                 |    |   |
| 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.  |                                       |             |                    |  |           |   |                 |   |                 |    |   |

Since rating other than the above can be manufactured a please ask for detail.

**■ Drawing**

## Type numbering system (Example : 400V 120μF)

|  |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
|--|------|---|---|---|---|---|---|---|----|----|----|----|----|----|------|----|---|----|---|----|---|----|---|----|---|
| 1  | 2    | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |    |      |    |   |    |   |    |   |    |   |    |   |
| L  | G    | J | 2 | G | 1 | 2 | 1 | M | E  | L  | B  | 2  | 0  |    |      |    |   |    |   |    |   |    |   |    |   |
| Size code  |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Case dia. code   |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| <table border="1"> <tr> <td>φD</td> <td>Code</td> </tr> <tr> <td>20</td> <td>Y</td> </tr> <tr> <td>22</td> <td>Z</td> </tr> <tr> <td>25</td> <td>A</td> </tr> <tr> <td>30</td> <td>B</td> </tr> <tr> <td>35</td> <td>C</td> </tr> </table> |      |   |   |   |   |   |   |   |    |    |    |    |    | φD | Code | 20 | Y | 22 | Z | 25 | A | 30 | B | 35 | C |
| φD   | Code |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| 20   | Y    |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| 22   | Z    |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| 25   | A    |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| 30   | B    |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| 35   | C    |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Configuration  |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Capacitance tolerance (±20%)   |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Rated capacitance (120μF)  |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Rated voltage (400V)   |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Series name  |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |
| Type   |      |   |   |   |   |   |   |   |    |    |    |    |    |    |      |    |   |    |   |    |   |    |   |    |   |

\* The other terminal is also available upon request.  
Please refer to page 346 for schematic of terminal dimensions.

**● Frequency coefficient of rated ripple current**

| Frequency (Hz) | 50          | 60   | 120  | 300  | 1 k  | 10k  | 50k or more |
|----------------|-------------|------|------|------|------|------|-------------|
| Coeff.         | 200 to 250V | 0.81 | 0.85 | 1.00 | 1.17 | 1.32 | 1.45        |
|                | 400 to 450V | 0.77 | 0.82 | 1.00 | 1.16 | 1.30 | 1.41        |

Minimum order quantity : 50pcs.

● Dimension table in next page.

**LGJ**

## ■ Dimensions

| 200V(2D)           |                          |                          |                         |                |
|--------------------|--------------------------|--------------------------|-------------------------|----------------|
| Cap.<br>( $\mu$ F) | Size<br>$\phi$ D × L(mm) | Rated ripple<br>(mA rms) | Leakage Current<br>(mA) | Code           |
| 180                | 20 × 20                  | 680                      | 0.56                    | LGJ2D181MELY20 |
| 220                | 22 × 20                  | 760                      | 0.62                    | LGJ2D221MELZ20 |
| 270                | 22 × 20                  | 780                      | 0.69                    | LGJ2D271MELZ20 |
| 330                | 25 × 20                  | 960                      | 0.77                    | LGJ2D331MELA20 |
| 390                | 30 × 20                  | 1080                     | 0.83                    | LGJ2D391MELB20 |
| 470                | 30 × 20                  | 1120                     | 0.91                    | LGJ2D471MELB20 |
| 560                | 35 × 20                  | 1440                     | 1.00                    | LGJ2D561MELC20 |
| 680                | 35 × 20                  | 1520                     | 1.10                    | LGJ2D681MELC20 |

| 250V(2E)           |                          |                          |                         |                |
|--------------------|--------------------------|--------------------------|-------------------------|----------------|
| Cap.<br>( $\mu$ F) | Size<br>$\phi$ D × L(mm) | Rated ripple<br>(mA rms) | Leakage Current<br>(mA) | Code           |
| 150                | 20 × 20                  | 660                      | 0.58                    | LGJ2E151MELY20 |
| 180                | 22 × 20                  | 750                      | 0.63                    | LGJ2E181MELZ20 |
| 220                | 25 × 20                  | 920                      | 0.70                    | LGJ2E221MELA20 |
| 270                | 30 × 20                  | 1040                     | 0.77                    | LGJ2E271MELB20 |
| 330                | 30 × 20                  | 1080                     | 0.86                    | LGJ2E331MELB20 |
| 390                | 35 × 20                  | 1410                     | 0.93                    | LGJ2E391MELC20 |
| 470                | 35 × 20                  | 1470                     | 1.02                    | LGJ2E471MELC20 |

| 400V(2G)           |                          |                          |                         |                |
|--------------------|--------------------------|--------------------------|-------------------------|----------------|
| Cap.<br>( $\mu$ F) | Size<br>$\phi$ D × L(mm) | Rated ripple<br>(mA rms) | Leakage Current<br>(mA) | Code           |
| 56                 | 20 × 20                  | 550                      | 0.44                    | LGJ2G560MELY20 |
| 68                 | 22 × 20                  | 620                      | 0.49                    | LGJ2G680MELZ20 |
| 82                 | 25 × 20                  | 700                      | 0.54                    | LGJ2G820MELA20 |
| 100                | 25 × 20                  | 760                      | 0.60                    | LGJ2G101MELA20 |
| 120                | 30 × 20                  | 860                      | 0.65                    | LGJ2G121MELB20 |
| 150                | 30 × 20                  | 900                      | 0.73                    | LGJ2G151MELB20 |
| 180                | 35 × 20                  | 1160                     | 0.80                    | LGJ2G181MELC20 |
| 220                | 35 × 20                  | 1210                     | 0.88                    | LGJ2G221MELC20 |

| 450V(2W)           |                          |                          |                         |                |
|--------------------|--------------------------|--------------------------|-------------------------|----------------|
| Cap.<br>( $\mu$ F) | Size<br>$\phi$ D × L(mm) | Rated ripple<br>(mA rms) | Leakage Current<br>(mA) | Code           |
| 47                 | 20 × 20                  | 520                      | 0.43                    | LGJ2W470MELY20 |
| 56                 | 22 × 20                  | 600                      | 0.47                    | LGJ2W560MELZ20 |
| 68                 | 25 × 20                  | 670                      | 0.52                    | LGJ2W680MELA20 |
| 82                 | 25 × 20                  | 740                      | 0.57                    | LGJ2W820MELA20 |
| 100                | 30 × 20                  | 830                      | 0.63                    | LGJ2W101MELB20 |
| 120                | 30 × 20                  | 870                      | 0.69                    | LGJ2W121MELB20 |
| 150                | 35 × 20                  | 1170                     | 0.77                    | LGJ2W151MELC20 |

Rated ripple current (mA rms) at 105°C 120Hz