

# PLG Radial Lead Type, Higher Capacitance



**PLG**

Higher Capacitance  
**PLF**

- Higher Capacitance, Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type :  
Lead free flow soldering condition correspondence
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

## Specifications

| Item  | Performance Characteristics  |                       |   |
|---|--|-----------------------|---|
| Category Temperature Range                        | -55 to +105°C  |                       |   |
| Rated Voltage Range                               | 2.5 to 16V   |                       |   |
| Rated Capacitance Range                           | 330 to 3900µF  |                       |   |
| Capacitance Tolerance                             | ±20% at 120Hz, 20°C  |                       |   |
| Tangent of loss angle (tan δ)                     | Less than or equal to the specified value at 120Hz, 20°C   |                       |   |
| ESR (※ 1)   | Less than or equal to the specified value at 100kHz, 20°C  |                       |   |
| Leakage Current (※ 2)                             | Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C   |                       |   |
| Temperature Characteristics (Max.Impedance Ratio) | Z+105°C / Z+20°C ≤ 1.25 (100kHz)<br>Z-55°C / Z+20°C ≤ 1.25   |                       |   |
| Endurance   | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 2000 hours at 105°C.   | Capacitance change    | Within ± 20% of the initial capacitance value (※ 3) |
|   |  | tan δ                 | 150% or less than the initial specified value       |
|   |  | ESR (※ 1)             | 150% or less than the initial specified value       |
|   |  | Leakage current (※ 2) | Less than or equal to the initial specified value   |
| Damp Heat (Steady State)                          | The specifications listed at right shall be met when the capacitors are restored to 20°C after the rated voltage is applied for 1000 hours at 60°C, 90% RH.  | Capacitance change    | Within ± 20% of the initial capacitance value (※ 3) |
|   |  | tan δ                 | 150% or less than the initial specified value       |
|   |  | ESR (※ 1)             | 150% or less than the initial specified value       |
|   |  | Leakage current (※ 2) | Less than or equal to the initial specified value   |
| Resistance to Soldering Heat                      | After soldering the capacitor under the soldering conditions prescribed here as preheat at 150 to 200°C for 60 to 180 seconds and peak temperature at 265°C for 10 seconds or less, the capacitor shall meet the specifications listed at right, provided that its temperature profile is measured at both of terminal ends facing the soldering side. | Capacitance change    | Within ± 10% of the initial capacitance value (※ 3) |
|   |  | tan δ                 | 130% or less than the initial specified value       |
|   |  | ESR (※ 1)             | 130% or less than the initial specified value       |
|   |  | Leakage current (※ 2) | Less than or equal to the initial specified value   |
| Marking   | Navy blue print on the case top  |                       |   |

- ※ 1 ESR should be measured at both of the terminal ends closest to the capacitor body.
- ※ 2 Conditioning : If any doubt arises, measure the leakage current after the voltage treatment of applying DC rated voltage continuously to the capacitor for 120 minutes at 105°C.
- ※ 3 Initial value : The value before test of examination of resistance to soldering.

## Dimensions



| Size | φ8 × 9L | φ8 × 12L | φ10 × 13L |
|------|---------|----------|-----------|
| φD   | 8.0     | 8.0      | 10.0      |
| L    | 8.5     | 11.5     | 12.5      |
| P    | 3.5     | 3.5      | 5.0       |
| φd   | 0.6     | 0.6      | 0.6       |

| Voltage | V | 2.5 | 4 | 6.3 | 10 | 16 |
|---------|---|-----|---|-----|----|----|
| Code    | e | g   | j | A   | C  |    |

## Type numbering system (Example : 4V 1200µF)



## Frequency coefficient of rated ripple current

| Frequency   | 120Hz | 1kHz | 10kHz | 100kHz or more |
|-------------|-------|------|-------|----------------|
| Coefficient | 0.05  | 0.30 | 0.70  | 1.00           |

Please refer to page 20 about the end seal configuration.

● Dimension table in next page.

# PLG

■ Dimensions

| Rated Voltage (V) Code | Surge Voltage (V) | Rated Capacitance (μF) | Case Size φD × L (mm) | tan δ | Leakage Current (μA) | ESR (mΩ) (at 100kHz 20°C) | Rated Ripple (mA <sub>rms</sub> ) (105°C/100kHz) | Part Number  |
|------------------------|-------------------|------------------------|-----------------------|-------|----------------------|---------------------------|--|--------------|
| 2.5 (0E)               | 2.8               | 1800                   | 8 × 9                 | 0.08  | 900                  | 9                         | 6000   | PLG0E182MCO1 |
|                        |                   | 2200                   | 8 × 12                | 0.08  | 1100                 | 8                         | 6700   | PLG0E222MDO1 |
|                        |                   | 2700                   | 10 × 13               | 0.08  | 1350                 | 8                         | 5560   | PLG0E272MDO1 |
|                        |                   | 3900                   | 10 × 13               | 0.08  | 1950                 | 8                         | 7000   | PLG0E392MDO1 |
| 4 (0G)                 | 4.6               | 1200                   | 8 × 9                 | 0.08  | 960                  | 9                         | 5900   | PLG0G122MCO1 |
|                        |                   | 1800                   | 8 × 12                | 0.08  | 1440                 | 9                         | 6500   | PLG0G182MDO1 |
|                        |                   | 2700                   | 10 × 13               | 0.08  | 2160                 | 8                         | 6900   | PLG0G272MDO1 |
| 6.3 (0J)               | 7.2               | 820                    | 8 × 9                 | 0.08  | 1033                 | 9                         | 5700   | PLG0J821MCO1 |
|                        |                   | 1200                   | 8 × 12                | 0.08  | 1512                 | 9                         | 6100   | PLG0J122MDO1 |
|                        |                   | 1500                   | 10 × 13               | 0.08  | 1890                 | 9                         | 6300   | PLG0J152MDO1 |
|                        |                   | 1800                   | 10 × 13               | 0.08  | 2268                 | 8                         | 6600   | PLG0J182MDO1 |
| 10 (1A)                | 11.5              | 560                    | 8 × 9                 | 0.08  | 1120                 | 11                        | 5100   | PLG1A561MCO1 |
|                        |                   | 820                    | 8 × 12                | 0.08  | 1640                 | 10                        | 5800   | PLG1A821MDO1 |
|                        |                   | 1200                   | 10 × 13               | 0.08  | 2400                 | 9                         | 6200   | PLG1A122MDO1 |
| 16 (1C)                | 18.4              | 330                    | 8 × 9                 | 0.08  | 1056                 | 13                        | 4700   | PLG1C331MCO1 |
|                        |                   | 470                    | 8 × 12                | 0.08  | 1504                 | 11                        | 5400   | PLG1C471MDO1 |
|                        |                   | 820                    | 10 × 13               | 0.08  | 2624                 | 11                        | 5600   | PLG1C821MDO1 |

Rated ripple current (mA<sub>rms</sub>) at 105°C 100kHz

- Please refer to page 20, 21, 22 about the formed or taped product spec.
- Please refer to page 3 for the minimum order quantity.