

# PLG Radial Lead Type, Higher Capacitance



**PLG**

Higher Capacitance  
**PLF**

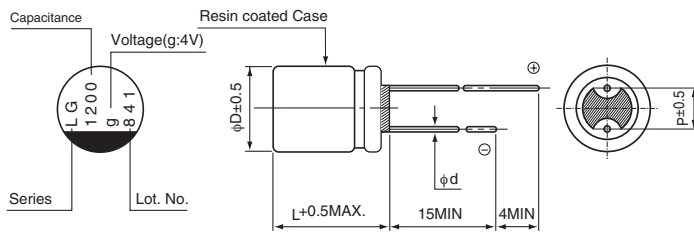
- Higher Capacitance, Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type :  
Lead free flow soldering condition correspondence
- Compliant to the RoHS directive (2011/65/EU,(EU)2015/863).

## 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.

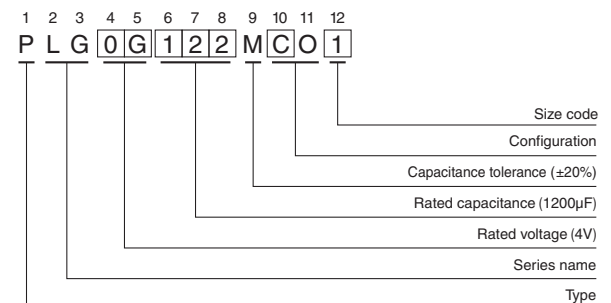
## Dimensions



| Size | (mm)    |          |           |
|------|---------|----------|-----------|
|      | 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.

## Данный компонент на территории Российской Федерации

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Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

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Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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