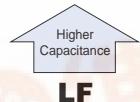


CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

LG Radial Lead Type, Higher Capacitance
series



- Higher Capacitance, Low ESR, High ripple current.
- Load life of 2000 hours at 105°C.
- Radial lead type :
Lead free flow soldering condition correspondence
- Adapted to the RoHS directive (2002/95/EC).



■ 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 | | | | | | | | | |
| tan δ | Not more than value of Standard ratings at 120Hz, 20°C | | | | | | | | | |
| ESR (*1) | Not more than value of Standard ratings at 100kHz, 20°C | | | | | | | | | |
| Leakage Current (*2) | Not more than value of Standard ratings. After 2 minute's application of rated voltage. 20°C | | | | | | | | | |
| Characteristics of Temperature | Z+105°C / Z+20°C ≤ 1.25 (100kHz) | | | | | | | | | |
| Impedance Ratio | Z-55°C / Z+20°C ≤ 1.25 | | | | | | | | | |
| Endurance | After 2000 hours' application of rated voltage at 105°C, capacitors meet the specified value for life characteristics listed at right. | <table border="1"> <tr> <td>Capacitance change</td><td>Within ± 20% of initial value (*3)</td></tr> <tr> <td>tan δ</td><td>150% or less of the initial specified value</td></tr> <tr> <td>ESR (*1)</td><td>150% or less of the initial specified value</td></tr> <tr> <td>Leakage current (*2)</td><td>Initial specified value or less</td></tr> </table> | Capacitance change | Within ± 20% of initial value (*3) | tan δ | 150% or less of the initial specified value | ESR (*1) | 150% or less of the initial specified value | Leakage current (*2) | Initial specified value or less |
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| tan δ | 150% or less of the initial specified value | | | | | | | | | |
| ESR (*1) | 150% or less of the initial specified value | | | | | | | | | |
| Leakage current (*2) | Initial specified value or less | | | | | | | | | |
| Damp Heat | After 1000 hours' application of rated voltage at 60°C 90%RH, capacitors meet the specified value for life characteristics listed at right. | <table border="1"> <tr> <td>Capacitance change</td><td>Within ± 20% of initial value (*3)</td></tr> <tr> <td>tan δ</td><td>150% or less of the initial specified value</td></tr> <tr> <td>ESR (*1)</td><td>150% or less of the initial specified value</td></tr> <tr> <td>Leakage current (*2)</td><td>Initial specified value or less</td></tr> </table> | Capacitance change | Within ± 20% of initial value (*3) | tan δ | 150% or less of the initial specified value | ESR (*1) | 150% or less of the initial specified value | Leakage current (*2) | Initial specified value or less |
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| ESR (*1) | 150% or less of the initial specified value | | | | | | | | | |
| Leakage current (*2) | Initial specified value or less | | | | | | | | | |
| Resistance to Soldering Heat | To comply with recommended conditions for reflow soldering. Pre-heating shall be done at 150 to 200°C and for 60 to 180 sec. Peak temp. is 265°C, within 10 sec. Measurement for solder temperature profile shall be made at a point on the terminal nearest where the terminals protrude through the soldering side of PC board. | <table border="1"> <tr> <td>Capacitance change</td><td>Within ± 10% of initial value (*3)</td></tr> <tr> <td>tan δ</td><td>130% or less of the initial specified value</td></tr> <tr> <td>ESR (*1)</td><td>130% or less of the initial specified value</td></tr> <tr> <td>Leakage current (*2)</td><td>Initial specified value or less</td></tr> </table> | Capacitance change | Within ± 10% of initial value (*3) | tan δ | 130% or less of the initial specified value | ESR (*1) | 130% or less of the initial specified value | Leakage current (*2) | Initial specified value or less |
| Capacitance change | Within ± 10% of initial value (*3) | | | | | | | | | |
| tan δ | 130% or less of the initial specified value | | | | | | | | | |
| ESR (*1) | 130% or less of the initial specified value | | | | | | | | | |
| Leakage current (*2) | Initial specified value or less | | | | | | | | | |
| Marking | Navy blue print on the case top. | | | | | | | | | |

(*1) ESR measurements should be made at a point on the terminal nearest the end seal of the capacitor.

(*2) Conditioning : If there is doubt about the measured result, measurement should be made again after the rated voltage is applied for 120 minutes at the temperature of 105°C.

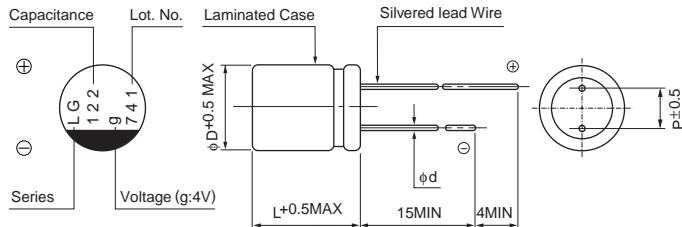
(*3) Initial value : The value before test of examination of resistance to soldering.

CONDUCTIVE POLYMER ALUMINUM SOLID ELECTROLYTIC CAPACITORS

nichicon

LG series

Dimensions

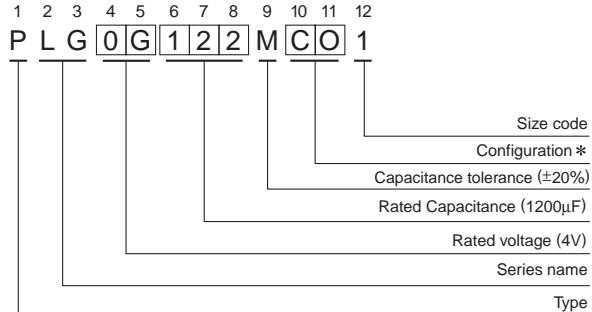


Voltage

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

| (mm) | | | |
|----------|--------------------|---------------------|----------------------|
| Size | $\phi 8 \times 9L$ | $\phi 8 \times 12L$ | $\phi 10 \times 13L$ |
| 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 |

Type numbering system (Example : 4V 1200μF)



* Configuration

| $\phi D \times L$ | Code |
|-------------------|------|
| 8×9 | CO |
| 8×12 | DO |
| 10×13 | DO |

Standard ratings

| Rated Voltage (V) Code | Surge Voltage (V) | Rated Capacitance (μF) | Case Size $\phi D \times L$ (mm) | $\tan \delta$ | Leakage Current (μA) | ESR (mΩ) (20°C / 100kHz) | Rated ripple (mA rms) (105°C / 100kHz) | Code |
|---------------------------|-------------------|------------------------|----------------------------------|---------------|----------------------|--------------------------|--|--------------|
| 2.5 (0E) | 2.8 | 1800 | 8 × 9 | 0.08 | 900 | 9 | 6000 | PLG0E182MCO1 |
| | | 2200 | 8 × 12 | 0.08 | 1100 | 8 | 6700 | PLG0E222MDO1 |
| | | 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 |
| | | 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 |

Design, Specifications are subject to change without notice.