**PCJ** Chip Type, Low ESR, Higher Capacitance

- Low ESR, Higher Capacitance, High ripple current.
- Load life of 2000 hours at 105°C.
- SMD type : Lead free reflow soldering condition at 260°C peak correspondence.
- Compliant to the RoHS directive (2011/65/EU).
- AEC-Q200 compliant. Please contact us for details.

**Specifications**

<table>
<thead>
<tr>
<th>Item</th>
<th>Performance Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category Temperature Range</td>
<td>–55 to +105°C</td>
</tr>
<tr>
<td>Rated Voltage Range</td>
<td>2.5 to 16V</td>
</tr>
<tr>
<td>Rated Capacitance Range</td>
<td>33 to 2700µF</td>
</tr>
<tr>
<td>Capacitance Tolerance</td>
<td>±20% at 120Hz, 20°C</td>
</tr>
<tr>
<td>Tangent of loss angle (tan δ)</td>
<td>Less than or equal to the specified value at 120Hz, 20°C</td>
</tr>
<tr>
<td>ESR (ε 1)</td>
<td>Less than or equal to the specified value at 100kHz, 20°C</td>
</tr>
<tr>
<td>Leakage Current (ε 2)</td>
<td>Less than or equal to the specified value. After 2 minutes' application of rated voltage at 20°C</td>
</tr>
<tr>
<td>Temperature Characteristics (Max. Impedance Ratio)</td>
<td>Z+105°C / Z+20°C ≤ 1.25 (100kHz)</td>
</tr>
</tbody>
</table>

**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.

**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.

**Resistance to Soldering Heat**

After soldering the capacitor under the soldering conditions prescribed here, the capacitor shall meet the specifications listed at right.

- Pre-heating shall be done at 150 to 200°C and for 60 to 180 sec.
- The duration for over +230°C temperature at capacitor surface shall not exceed 60 seconds.
- In case peak temperature is 250°C or less, reflow soldering shall be not exceed 60 seconds.
- The duration for over +230°C temperature at capacitor surface shall
- Measurement for solder temperature profile shall be made at the capacitor top and the terminal.

**Marking**

Navy blue print on the case top

- **1** ESR should be measured at both of the terminal ends closest where the terminals protrude through the plastic platform.
- **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**

**Type numbering system (Example : 6.3V 220µF)**

- **P** Taping code
- **C** Size code
- **J** Configuration
- **0** Capacitance tolerance (±20%)
- **2** Rated capacitance (220µF)
- **1** Rated voltage (6.3V)
- **M** Series name

<table>
<thead>
<tr>
<th>Voltage</th>
<th>Code</th>
<th>Frequency Coefficient of rated ripple current</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>2.5</td>
<td>0.05</td>
</tr>
<tr>
<td>4</td>
<td>6.3</td>
<td>0.30</td>
</tr>
<tr>
<td>10</td>
<td>16</td>
<td>0.70</td>
</tr>
</tbody>
</table>

- **Dimension table in next page.**

---

**Conductive Polymer Aluminum Solid Electrolytic Capacitors**

- **PCJ** Chip Type, Low ESR, Higher Capacitance
- **PCF** Chip Type, Low ESR, Higher Capacitance
### PCJ Conductive Polymer Aluminum Solid Electrolytic Capacitors

#### Dimensions

<table>
<thead>
<tr>
<th>Rated Voltage (V) (code)</th>
<th>Surge Voltage (V)</th>
<th>Rated Capacitance (μF)</th>
<th>Case Size (⌀D × L (mm))</th>
<th>tan δ</th>
<th>Leakage Current (μA)</th>
<th>ESR (mΩ)</th>
<th>Rated Ripple (mAms)</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 (0E)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 (0G)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3 (0J)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 (1A)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 (1C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **Taping specifications are given in page 23.**
- **Recommended land size, soldering by reflow are given in page 18, 19.**
- **Please refer to page 3 for the minimum order quantity.**

- No marked, □ will be put at 12th digit of type numbering system.
- □ will be put at 12th digit of type numbering system.
- □ will be put at 12th digit of type numbering system.
- □ will be put at 12th digit of type numbering system.

- **ESR (mΩ)**

- **Rated ripple current (mAms) at 105°C 100kHz**

- **Rated Voltage (V)(code)**
- **Surge Voltage (V)**
- **Rated Capacitance (μF)**
- **Case Size (⌀D × L (mm))**
- **tan δ**
- **Leakage Current (μA)**
- **ESR (mΩ)**
- **Rated Ripple (mAms)**
- **Part Number**