Shielded High Current Power Choke

PCXA603

Features

- High Operating Temperature Range
- High Efficiency
- High Current with Soft Saturation
- Low DCR
- Suitable for pick and place
- Very low acoustic noise and very low leakage flux noise.

Electrical

Inductance Range: 0.18µH to 4.5µH

Tolerance: ±20% Across entire series

Test Frequency: 100KHz, 0.1V

Operating Temp: -40°C to +125°C

MSL: Level 1

I rms: Current at which ∆T=20°C and ∆T=40°C temp rise without core loss.

Isat: Current at which Inductance drop is approximately 30%. The part temperature (ambient + temp rise) should not exceed 125°C under worst case operating conditions.

Resistance to Soldering Heat

Pre-Heat: 150°C, 1 minute.

Solder Composition: Sn96.5% / Ag3% / Cu0.5%

Solder Temp: 245°C ± 5°C

Immersion Time: 4 sec. ± 1 sec.

Depth: Completely cover the termination

Test Equipment

(L): HP4284A LCR meter or equivalent

DCR: CH16502, Agilent 33420A Micro-Ohmmeter

Physical

Packaging: 1000 pieces per 13 inch reel.

Marking: EIA Inductance Code/ Date Code
Typical Performance Curves
**Packaging Information**

### Reel Dimension

![Reel Dimension Diagram]

### Tape Dimension

![Tape Dimension Diagram]

<table>
<thead>
<tr>
<th>Type</th>
<th>A(mm)</th>
<th>B(mm)</th>
<th>C(mm)</th>
<th>D(mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>330x12mm</td>
<td>16.4±0.2</td>
<td>100±2</td>
<td>13±0.5/0.2</td>
<td>330</td>
</tr>
</tbody>
</table>

**Tearing Off Force**

The force for tearing off cover tape is 10 to 130 grams in the arrow direction under the following conditions (referenced ANSI/EIA-481-D-2008 of 4.11 standard).

![Tearing Off Force Diagram]

<table>
<thead>
<tr>
<th>Room Temp. (℃)</th>
<th>Room Humidity (%)</th>
<th>Room atm (hPa)</th>
<th>Tearing Speed (mm/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5~35</td>
<td>45~85</td>
<td>860~1060</td>
<td>300</td>
</tr>
</tbody>
</table>

**Application Notice**

- **Storage Conditions**
  - To maintain the solderability of terminal electrodes:
    2. Temperature and humidity conditions: Less than 40℃ and 60% RH.
    3. Recommended products should be used within 12 months from the time of delivery.
    4. The packaging material should be kept where no chlorine or sulfur exists in the air.

- **Transportation**
  - 1. Products should be handled with care to avoid damage or contamination from perspiration and skin oils.
  - 2. The use of tweezers or vacuum pick up is strongly recommended for individual components.
  - 3. Bulk handling should ensure that abrasion and mechanical shock are minimized.