Shielded High Current Power Choke  
**PCXA402**

### 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:** 0.10µH to 2.2µH  
**Tolerance:** ±20% Across entire series  
**Test Frequency:** 100KHz, 0.1V  
**Operating Temp:** -40ºC to +125ºC  
**Irms:** Current at which ∆T=20ºC & ∆T=40ºC 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:** 150ºC, 1 minute.  
- **Solder Composition:** Sn96.5% Ag3% Cu0.5%  
- **Solder Temp:** 245ºC ± 5ºC  
- **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:** 3000 pieces per 13 inch reel.  
- **Marking:** EIA Inductance Code/ Date Code

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All specifications subject to change without notice.

### Reflow Soldering

![Reflow Soldering Diagram](image)  
Reflow times: 3 times max.

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**Allied Part Number**

<table>
<thead>
<tr>
<th>Allied Part Number</th>
<th>Inductance (µH) ±20% @ 0A</th>
<th>DCR (mΩ) Typ.@25ºC</th>
<th>DCR (mΩ) Max@25ºC</th>
<th>Irms (A) Typ.</th>
<th>Isat (A)</th>
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**Dimensions:**

![Dimensions Diagram](image)
Typical Performance Curves
Packaging Information

Tape Dimension

<table>
<thead>
<tr>
<th>Type</th>
<th>A(mm)</th>
<th>B(mm)</th>
<th>C(mm)</th>
<th>D(mm)</th>
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<tr>
<td>330x12mm</td>
<td>12.4±2</td>
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Reel Dimension

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).

Application Notice

- **Storage Conditions**
  - To maintain the solderability of terminal electrodes:
    2. Temperature and humidity conditions: Less than 40°C 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.