Allied Part Number | Inductance (µH) ±20% @ 0A | DCR (mΩ) Typ.@25°C | DCR (mΩ) Max@25°C | Irms (A) Typ. | Isat (A) 
--- | --- | --- | --- | --- | --- 
PCXA502-R15M | 0.15 | 4.00 | 6.60 | 13.9 | 18.8 | 30.0 | 27.0 
PCXA502-R16M | 0.16 | 4.00 | 6.60 | 13.9 | 18.8 | 30.0 | 27.0 
PCXA502-R33M | 0.33 | 6.10 | 7.00 | 10.5 | 14.4 | 26.0 | 24.0 
PCXA502-R47M | 0.47 | 7.00 | 8.05 | 10.1 | 14.1 | 22.0 | 20.0 
PCXA502-R56M | 0.56 | 8.70 | 9.54 | 9.9 | 13.9 | 19.0 | 16.0 
PCXA502-R68M | 0.68 | 8.90 | 10.2 | 9.6 | 13.4 | 16.0 | 14.0 
PCXA502-R80M | 0.80 | 10.3 | 11.8 | 9.4 | 13.0 | 15.5 | 13.5 
PCXA502-R82M | 0.82 | 11.0 | 12.7 | 8.5 | 12.0 | 15.0 | 13.0 
PCXA502-R10M | 1.00 | 12.0 | 13.8 | 7.5 | 10.5 | 14.5 | 12.8 
PCXA502-R12M | 1.20 | 14.2 | 16.3 | 6.8 | 9.40 | 14.0 | 12.2 
PCXA502-R15M | 1.50 | 16.2 | 18.7 | 6.4 | 8.80 | 13.3 | 11.7 

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: 0.15µH to 1.5µH
- Tolerance: ±20% Across entire series
- Test Frequency: 100KHz, 0.1V
- Operating Temp: -40°C to +125°C
- MSL: Level 1
- Irms: Current at which ΔT=20°C & ΔT=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: 3000 pieces per 13 inch reel.
- Marking: EIA Inductance Code/ Date Code
Typical Performance Curves

- **PCXA502-R15**: 0 7 14 21 28 35 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R16**: 0 6 12 18 24 30 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R33**: 0 5 10 15 20 25 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R47**: 0 4.4 8.8 13.2 17.6 22 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R56**: 0 3.6 7.2 10.8 14.4 18 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R68**: 0 3.4 6.8 10.2 13.6 17 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R80**: 0 3.2 6.4 9.6 12.8 16 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-R82**: 0 3.2 6.4 9.6 12.8 16 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-1R0**: 0 3 6 9 12 15 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-1R2**: 0 3 6 9 12 15 DC CURRENT (A) vs. INDUCTANCE (µH) vs. TEMP. RISE (oC)
- **PCXA502-1R5**
Packaging Information

Reel Dimension

Tape Dimension

<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>12.4±2/0</td>
<td>100±2</td>
<td>13±0.5/0.2</td>
<td>330</td>
</tr>
</tbody>
</table>

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**
  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.