Power Choke High Current  

**Features**

- Magnetically shielded construction
- Expanded operating temp range
- High Current
- Low DCR
- Suitable for pick and place
- Series is RoHS Compliant

**Electrical**

- Inductance Range: 0.47µH to 10µH
- Tolerance: ±20% Across entire series
- Test Frequency: 100KHz, 1V
- Operating Temp: -40ºC to +125ºC
- Irms: Current at which ΔT=40ºC temp rise without core loss.
- Isat: Current at which Inductance drop is approximately 30%. The part temperature (ambient + temp rise) should not exceed 125ºC 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 Mirco-Ohmmeter

**Physical**

- Packaging: 3000 pieces per 13 inch reel.
- Marking: EIA Inductance Code/ Date Code

---

**Inductance**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Inductance (µH)</th>
<th>DCR (mΩ) Typ. @25°C</th>
<th>DCR (mΩ) Max@25°C</th>
<th>Irms (A) Typ.</th>
<th>Isat (A) Typ.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCHC320H-R47M</td>
<td>0.47</td>
<td>19.7</td>
<td>23</td>
<td>7.0</td>
<td>9.0</td>
</tr>
<tr>
<td>PCHC320H-R65M</td>
<td>0.68</td>
<td>25.5</td>
<td>29</td>
<td>5.5</td>
<td>7.0</td>
</tr>
<tr>
<td>PCHC320H-1R0M</td>
<td>1.00</td>
<td>32</td>
<td>38</td>
<td>4.0</td>
<td>5.0</td>
</tr>
<tr>
<td>PCHC320H-1R5M</td>
<td>1.50</td>
<td>42</td>
<td>50</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>PCHC320H-2R2M</td>
<td>2.20</td>
<td>65</td>
<td>75</td>
<td>3.5</td>
<td>3.7</td>
</tr>
<tr>
<td>PCHC320H-3R3M</td>
<td>3.30</td>
<td>125</td>
<td>145</td>
<td>3.0</td>
<td>3.5</td>
</tr>
<tr>
<td>PCHC320H-4R7M</td>
<td>4.70</td>
<td>172</td>
<td>200</td>
<td>2.6</td>
<td>3.0</td>
</tr>
<tr>
<td>PCHC320H-5R6M</td>
<td>5.60</td>
<td>205</td>
<td>238</td>
<td>2.2</td>
<td>2.6</td>
</tr>
<tr>
<td>PCHC320H-6R8M</td>
<td>6.80</td>
<td>260</td>
<td>300</td>
<td>1.9</td>
<td>2.2</td>
</tr>
<tr>
<td>PCHC320H-8R2M</td>
<td>8.20</td>
<td>340</td>
<td>390</td>
<td>1.6</td>
<td>1.9</td>
</tr>
<tr>
<td>PCHC320H-101M</td>
<td>10.0</td>
<td>366</td>
<td>422</td>
<td>1.4</td>
<td>1.6</td>
</tr>
</tbody>
</table>

All specifications subject to change without notice.

---

**Reflow Soldering**

**Pre-Heating**

- TP(260°C / 10s max.)

**Soldering**

- 217°C / 20-40s
- 200°C / 60-180s
- 135°C / 480s max.

**Natural Cooling**

- 60~150s
- 25°C

Reflow times: 3 times max.
Typical Performance Curves

- PCHC320H-R47M
- PCHC320H-R68M
- PCHC320H-1R0M
- PCHC320H-1R5M
- PCHC320H-2R2M
- PCHC320H-3R3M
- PCHC320H-4R7M
- PCHC320H-5R6M
- PCHC320H-6R8M
- PCHC320H-8R2M
- PCHC320H-100M
Packaging Information

Reel Dimension

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>48+0.079</td>
<td>12.4+2.0</td>
<td>3.94+0.079</td>
<td>13.0+3.0</td>
</tr>
<tr>
<td>100±2.0</td>
<td>13+0.5</td>
<td>3.94±0.079</td>
<td>13+3.0</td>
</tr>
</tbody>
</table>

Tape Dimension