**Power Inductor – HA3588-BL**

- Designed for high current power supply applications
- Saturation current of 37 Amps
- Flat wire windings provide exceptionally low DC resistance
- Vertical mounting provides a small footprint

**Core material** Ferrite

**Terminations** RoHS compliant tin-silver over copper. Other terminations available at additional cost.

**Weight** 37 g

**Ambient temperature** –40°C to +85°C with (40°C rise) Irms current.

**Maximum part temperature** +125°C (ambient + temp rise). [Derating](#).

**Storage temperature** Component: –40°C to +125°C.

Tray packaging: –40°C to +80°C

**Moisture Sensitivity Level (MSL)** 1 (unlimited floor life at <30°C / 85% relative humidity)

**Failures in Time (FIT) / Mean Time Between Failures (MTBF)**
38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging** 25 parts per tray

**PCB washing** Only pure water or alcohol recommended

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance ±10% (µH)</th>
<th>DCR max (mOhms)</th>
<th>SRF typ (MHz)</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA3588-BL</td>
<td>10.0</td>
<td>2.6</td>
<td>17</td>
<td>10% drop</td>
<td>20% drop</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30</td>
<td>34</td>
</tr>
</tbody>
</table>

1. Inductance tested at 300 kHz, 0.1 Vrms on Agilent/HP 4192A.
2. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
3. SRF measured on an Agilent/HP 8753ES network analyzer.
4. DC current at which the inductance drops the specified amount from its value without current.
5. Current that causes the specified temperature rise of the winding from 25°C ambient. Temperature rise of the core is usually less than that of the winding.
6. Electrical specifications at 25°C.

**Caution:**

This series is not intended for use in high vibration or mechanical shock environments. We advise using additional means of securing the part to the circuit board to ensure its adhesion.

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**Recommended PC Board Layout**

Dimensions are in inches/mm

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This product may not be used in medical or high risk applications without prior Coilcraft approval.

Specification subject to change without notice. Please check web site for latest information.

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Taking a look at the details of the HA3588-BL Power Inductor: it is designed for high current power supply applications, capable of carrying a saturation current of 37 Amps. The flat wire windings ensure exceptionally low DC resistance, and vertical mounting is used to save space. The Coilcraft core material ensures efficient performance.

With a weight of 37 grams, this inductor is suitable for various applications. Its ambient temperature range of –40°C to +85°C with a 40°C rise in Irms current, and a maximum part temperature of +125°C (ambient + temp rise), make it versatile for different environments. It is also RoHS compliant, making it environmentally friendly.

**Storage Temperature:**
- Component: –40°C to +125°C
- Tray packaging: –40°C to +80°C

**Moisture Sensitivity Level (MSL):**
- Level 1 (unlimited floor life at <30°C / 85% relative humidity)

**Failures in Time (FIT)/ Mean Time Between Failures (MTBF):**
- 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

**Packaging:**
- 25 parts per tray

**PCB Washing:**
- Only pure water or alcohol is recommended.

The table includes detailed specifications for Inductance, DCR max, SRF typ, Isat, and Irms across various percentages and temperature rises. This information is crucial for engineers to select the appropriate inductor for their specific application needs.

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The **Caution** section highlights the importance of ensuring the part is secured to the circuit board to prevent adhesion issues, especially in high vibration or mechanical shock environments. This is a critical reminder to take into account during the design phase.
Power Inductor – HA3588-BL

L vs Current

L vs Frequency