Power Inductor – HA3808-AL

- Designed for Texas Instruments TPS6211X 1.5A, 17-Vin 1 MHz Step-Down Converters with LBI and PG functions.
- High current, magnetically shielded power inductor
- Soft saturation makes them ideal for VRM/VRD applications

Terminations  RoHS compliant matte tin over nickel over copper.
Weight 0.52 g
Ambient temperature –40°C to +125°C. The part can be operated without damage as long as the part (ambient temperature plus temperature rise due to self heating) does not exceed +165°C.
Storage temperature  Component: –40°C to +165°C. Packaging: –40°C to +80°C
Resistance to soldering heat  Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL)  1 (unlimited floor life at <30°C / 85% relative humidity)
Mean Time Between Failures (MTBF)  26,315,789 hours
Packaging  500/7″ reel; 2500/13″ reel Plastic tape: 16 mm wide, 0.35 mm thick, 8 mm pocket spacing, 2.3 mm pocket depth
PCB washing  Only pure water or alcohol recommended

<table>
<thead>
<tr>
<th>Part number</th>
<th>Inductance ±20% (µH)</th>
<th>DCR (mOhm) typ &amp; max</th>
<th>SRF typ MHz</th>
<th>Isat (A)</th>
<th>Irms (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA3808-AL_</td>
<td>6.8</td>
<td>99.0</td>
<td>109</td>
<td>15</td>
<td>4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.9</td>
<td>2.7</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>3.6</td>
<td>2.0</td>
</tr>
</tbody>
</table>

1. When ordering, please specify packaging code:
   HA3808-AL C
   Packaging: C = 7″ machine-ready reel. EIA-481 embossed plastic tape (500 parts per full reel).
   B = Less than full reel. In tape, but not machine ready.
   To have a leader and trailer added ($25 charge), use code letter C instead.
   D = 13″ machine-ready reel. EIA-481 embossed plastic tape.
   Factory order only, not stocked (2500 parts per full reel).
2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 4395A or equivalent.
5. DC current at which the inductance drops the specified amount from its value without current.
6. Electrical specifications at 25°C.
   Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Dimensions are in inches

Recommended Land Pattern

Coilcraft®

Specifications subject to change without notice.
Please check our website for latest information.

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SMT Power Inductor – HA3808-AL

Typical L vs Current

Typical L vs Frequency

Inductance (µH) vs Current (A)

Inductance (µH) vs Frequency (MHz)

6.8 µH