**Features**

- Monolithic construction offering high reliability
- Magnetically shielded construction providing low radiation
- Low DC resistance
- Low profile, 1008 size (2.5 x 2 x 0.9 mm)
- RoHS compliant*

**Applications**

- DC/DC converters for:
  - Smart phones
  - DVCs / DSCs
  - Tablets
  - HDDs / SSDs
  - Mobile electronic devices

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**CVH252009 Series Multilayer Power Chip Inductors**

### Electrical Specifications

<table>
<thead>
<tr>
<th>Bourns® Part No.</th>
<th>Inductance (1) @ 1 MHz / 0.1 V</th>
<th>SRF (MHz)</th>
<th>DCR (Ohms)</th>
<th>IDC (mA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVH252009-R47M</td>
<td>0.47 ±20 %</td>
<td>100</td>
<td>0.04</td>
<td>1800</td>
</tr>
<tr>
<td>CVH252009-1R0M</td>
<td>1.0 ±20 %</td>
<td>60</td>
<td>0.055</td>
<td>1600</td>
</tr>
<tr>
<td>CVH252009-1R5M</td>
<td>1.5 ±20 %</td>
<td>50</td>
<td>0.07</td>
<td>1500</td>
</tr>
<tr>
<td>CVH252009-2R2M</td>
<td>2.2 ±20 %</td>
<td>40</td>
<td>0.08</td>
<td>1300</td>
</tr>
<tr>
<td>CVH252009-3R3M</td>
<td>3.3 ±20 %</td>
<td>30</td>
<td>0.10</td>
<td>1200</td>
</tr>
<tr>
<td>CVH252009-4R7M</td>
<td>4.7 ±20 %</td>
<td>25</td>
<td>0.11</td>
<td>1100</td>
</tr>
</tbody>
</table>

(1) Apply 0.4 - 0.6 Adc to inductor for 1 - 3 seconds before taking inductance measurement.

### General Specifications

- Operating Temperature: -55 °C to +125 °C (Temperature rise included)
- Storage Temperature: +40 °C max. at 70 % RH
- Resistance to Soldering Heat: +260 °C
- Temperature Rise: 40 °C at rated current
- Moisture Sensitivity Level: 1
- ESD Classification (HBM): N/A

### Materials

- Core: Ferrite
- Terminal: Ni/Sn
- Packaging: 3000 pcs. per 7 inch reel

### Product Dimensions

- **FERRITE**
- **TERMINAL ELECTRODE**

### Recommended Layout

**DIMENSIONS: MM (INCHES)**

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*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

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**WARNING** Cancer and Reproductive Harm - www.P65Warnings.ca.gov
CVH252009 Series Multilayer Power Chip Inductors

**L vs. Idc**

![Graph showing L vs. Idc](image)

**L vs. Frequency**

![Graph showing L vs. Frequency](image)

**Packaging Specifications**

![Diagram of packaging specifications](image)

**User Direction of Feed**

3000 PCS. PER REEL

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REV. 10/17

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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