

### 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

CVH252009 Series Multilayer Power Chip Inductors

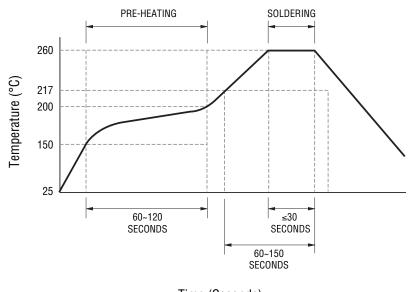
- HDDs / SSDs
- Mobile electronic devices

**Electrical Specifications** 

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

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

#### Soldering Profile (Lead Free Solder)



Time (Seconds)

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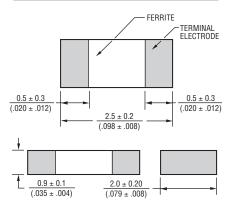
#### **General Specifications**

| 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 Level1  |
| ESD Classification (HBM)N/A  |
|                              |

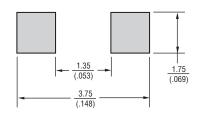
#### Materials

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

#### **Product Dimensions**

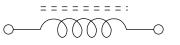


#### **Recommended Layout**





Schematic

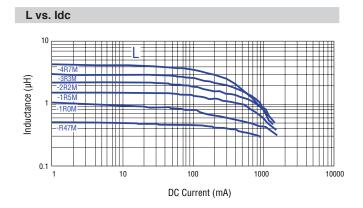


\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

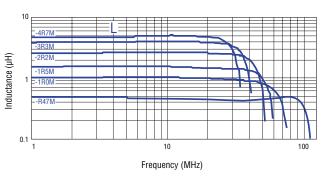
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# CVH252009 Series Multilayer Power Chip Inductors

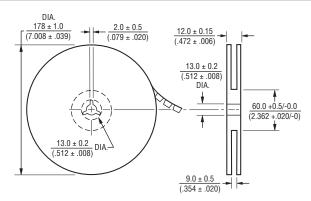
## BOURNS

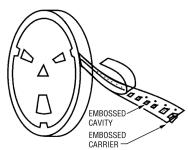


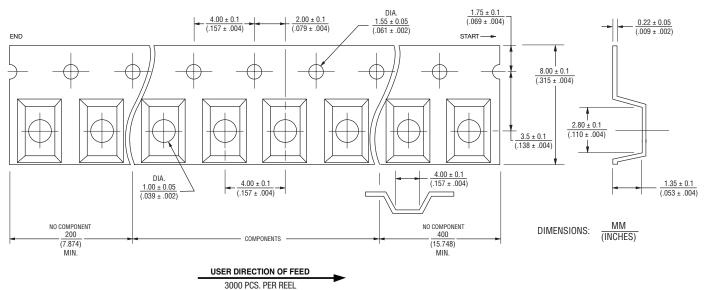
#### L vs. Frequency



#### **Packaging Specifications**







#### REV. 10/17

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Users should verify actual device performance in their specific applications.

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