

## 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

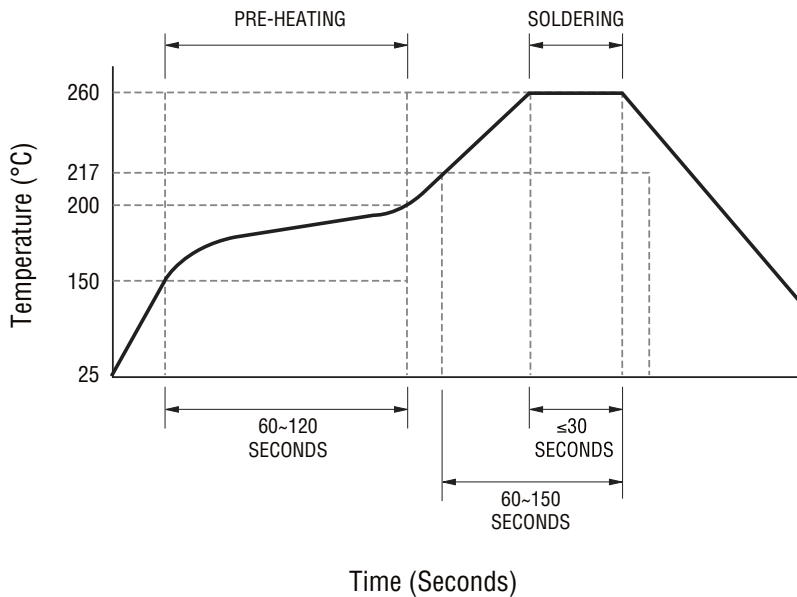
# CVH252009 Series Multilayer Power Chip Inductors

### 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.  | Typ.         | Max.          | Typ.        |
| 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)



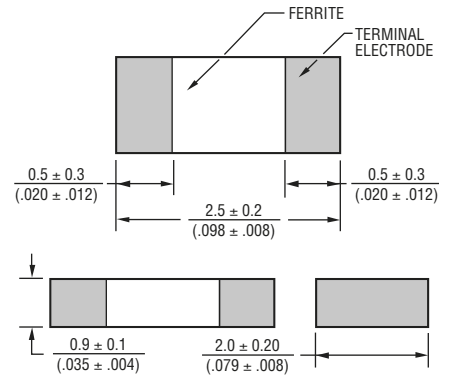
### General Specifications

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

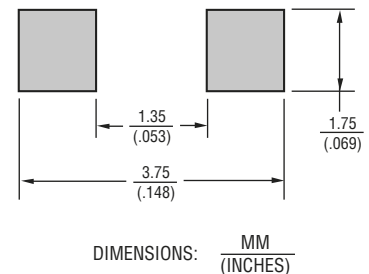
### Materials

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

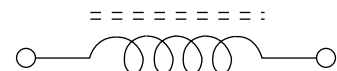
### Product Dimensions



### Recommended Layout



### Schematic



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Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

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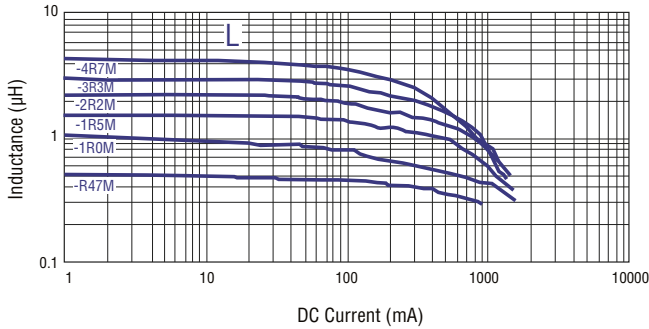
**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

\* 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](http://www.bourns.com/docs/legal/disclaimer.pdf)

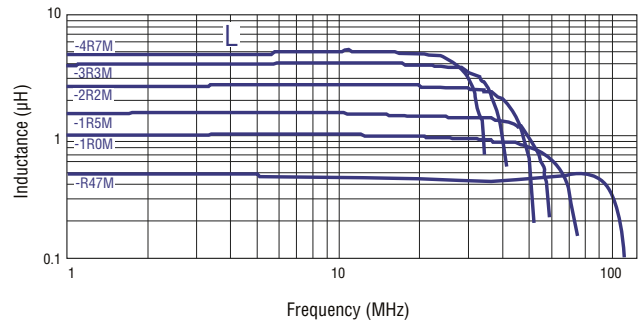
# CVH252009 Series Multilayer Power Chip Inductors

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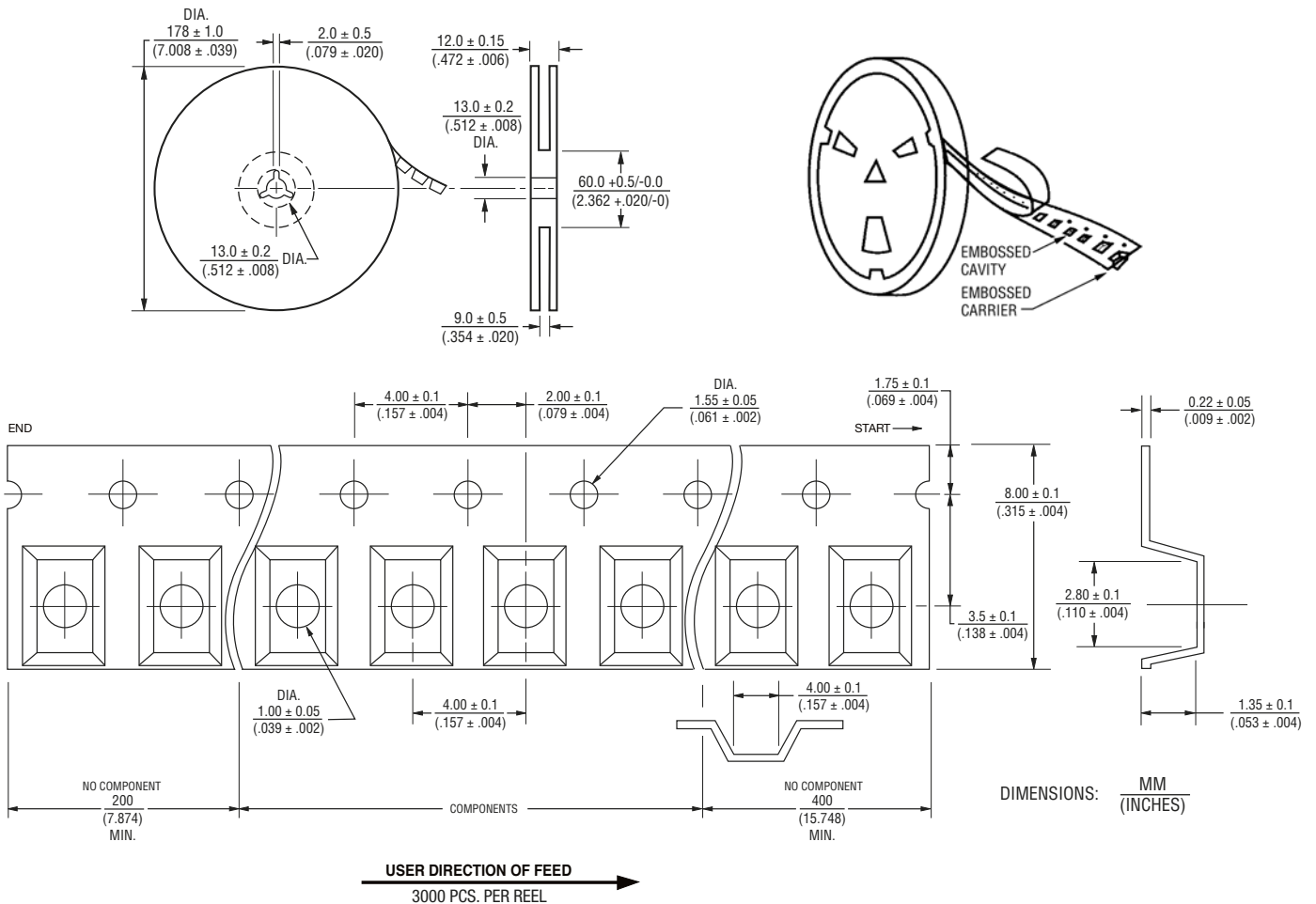
## L vs. I<sub>dc</sub>



## L vs. Frequency



## Packaging Specifications



REV. 10/17

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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