



## Features

- Semi-shielded construction
- Inductance range: 0.47 to 10  $\mu$ H
- Rated current up to 1.45 A
- AEC-Q200 qualified
- Low profile: 0.8 mm max.
- RoHS compliant\* and halogen free\*\*

## Applications

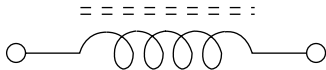
- Automotive systems:
  - Driver assistant
  - Infotainment
  - Lighting
- DC/DC converters
- Power supplies
- Wearable devices
- HDD, SSDs
- Smartphones
- LCD displays

# SRN2508A Series - Semi-shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 1 MHz / 0.1 V		Q @ 1 MHz Typ.	SRF (MHz) Typ.	DCR ( $\Omega$ ) $\pm 20$ %	I <sub>rms</sub> (A) Typ.	I <sub>sat</sub> (A) Typ.
	L ( $\mu$ H)	Tol. %					
SRN2508A-R47M	0.47	$\pm 20$	10	340	0.080	1.45	2.50
SRN2508A-R68M	0.68	$\pm 20$	10	270	0.100	1.35	2.05
SRN2508A-1R0M	1.0	$\pm 20$	10	220	0.120	1.20	1.75
SRN2508A-1R5M	1.5	$\pm 20$	10	180	0.170	1.05	1.65
SRN2508A-2R2M	2.2	$\pm 20$	10	140	0.210	0.95	1.40
SRN2508A-3R3M	3.3	$\pm 20$	10	110	0.300	0.85	1.10
SRN2508A-4R7M	4.7	$\pm 20$	10	90	0.400	0.70	0.90
SRN2508A-6R8M	6.8	$\pm 20$	10	80	0.670	0.55	0.75
SRN2508A-100M	10	$\pm 20$	10	50	0.930	0.45	0.55

### Electrical Schematic

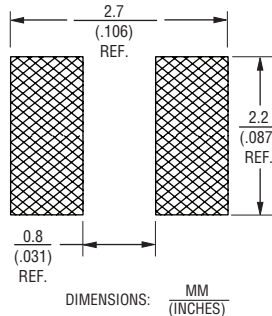


### How to Order

SRN2508A - R47M

Model \_\_\_\_\_  
Value Code (see table) \_\_\_\_\_

### Recommended Layout



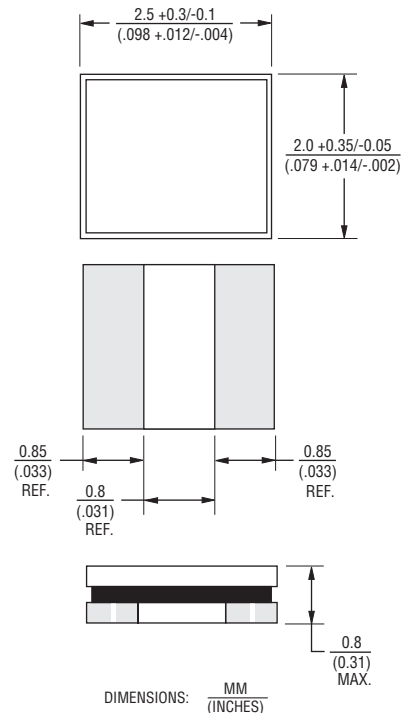
### General Specifications

Operating Temperature ..... -55 °C to +125 °C  
(Temperature rise included)  
Storage Temperature (Component) ..... -55 °C to +125 °C  
Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
Rated Current ..... Inductance drops 30 % at I<sub>sat</sub>  
Moisture Sensitivity Level ..... 1  
ESD Classification (HBM) ..... N/A

### Materials

Core ..... Ferrite  
Wire ..... Enameled copper  
Terminal Finish ..... Sn  
Coating ..... Magnetic epoxy resin  
Packaging ..... 2000 pcs. per 7-inch reel

### Product Dimensions



\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

Specifications are subject to change without notice.

The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.

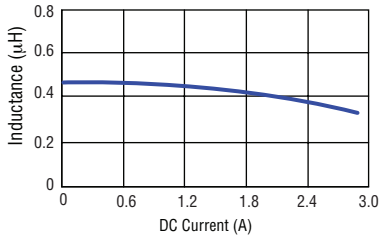
Users should verify actual device performance in their specific applications.

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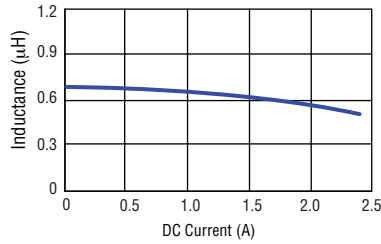
**BOURNS®**

## Inductance vs. Current

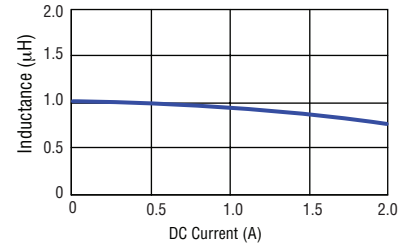
**SRN2508A-R47M**



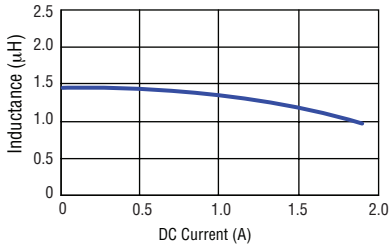
**SRN2508A-R68M**



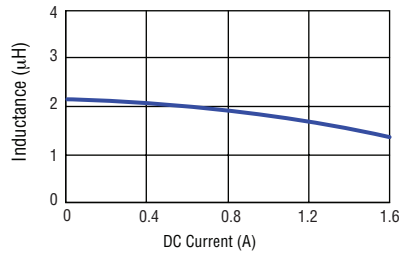
**SRN2508A-1R0M**



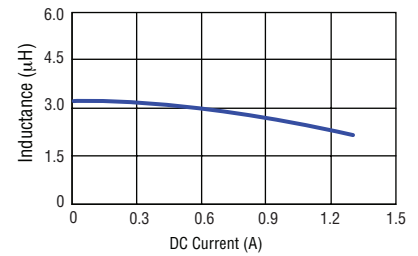
**SRN2508A-1R5M**



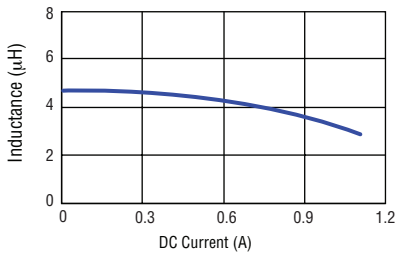
**SRN2508A-2R2M**



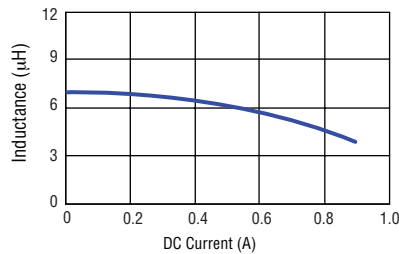
**SRN2508A-3R3M**



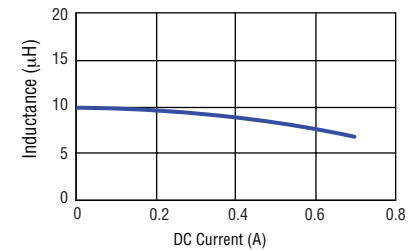
**SRN2508A-4R7M**



**SRN2508A-6R8M**



**SRN2508A-100M**

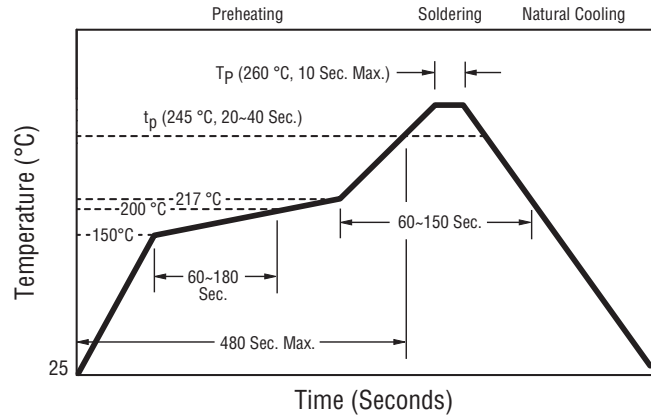


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## Soldering Profile



## Packaging Specifications

