



## Features

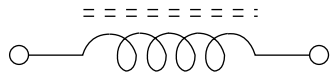
- Semi-shielded construction
- Inductance range: 0.47 to 10  $\mu$ H
- Rated current up to 1.45 A
- AEC-Q200 qualified
- Low profile: 0.8 mm max.
- RoHS compliant\* and halogen free\*\*

# SRN2508A Series - Semi-shielded Power Inductors

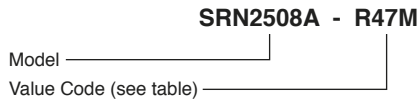
## Electrical Specifications @ 25 °C

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

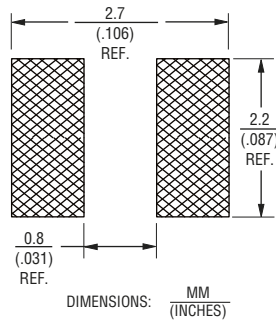
## Electrical Schematic



## How to Order



## 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

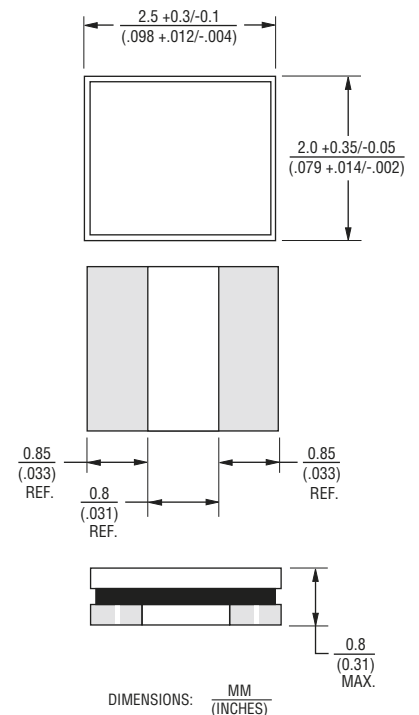
Wire ..... Enamelled copper

Terminal Finish ..... Sn

Coating ..... Magnetic epoxy resin

Packaging ..... 2000 pcs. per 7-inch reel

## Product Dimensions



Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com  
 EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com  
 The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com  
 www.bourns.com



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

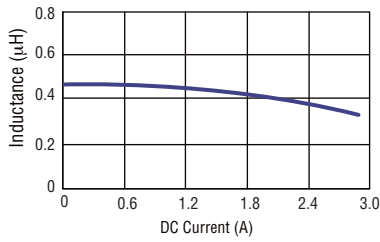
\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.  
 \*\*Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.  
 Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.  
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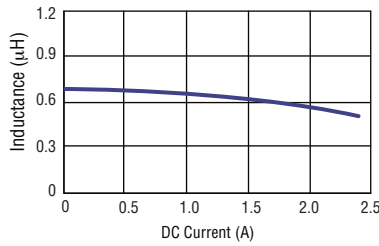
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## Inductance vs. Current

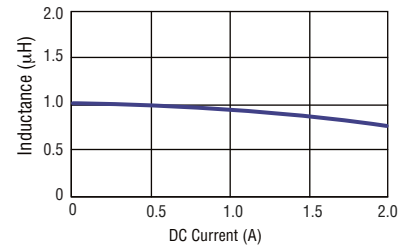
**SRN2508A-R47M**



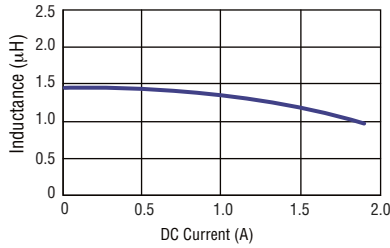
**SRN2508A-R68M**



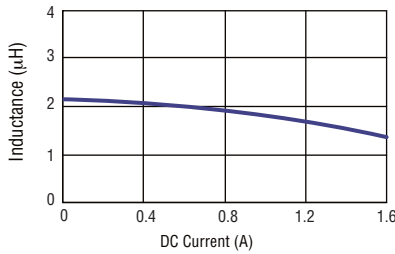
**SRN2508A-1R0M**



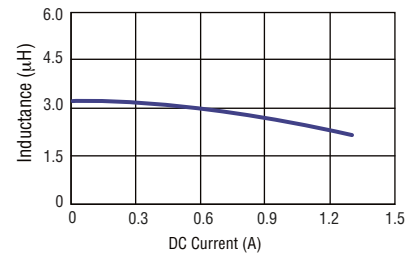
**SRN2508A-1R5M**



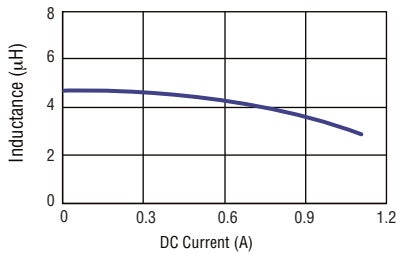
**SRN2508A-2R2M**



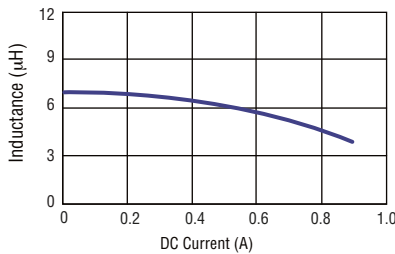
**SRN2508A-3R3M**



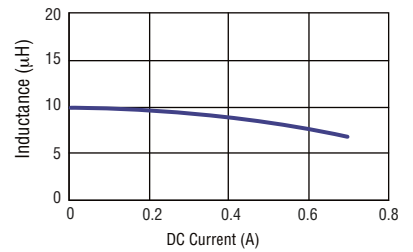
**SRN2508A-4R7M**



**SRN2508A-6R8M**



**SRN2508A-100M**



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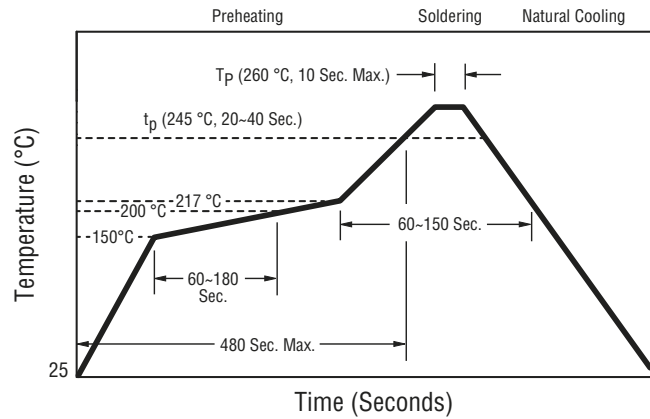
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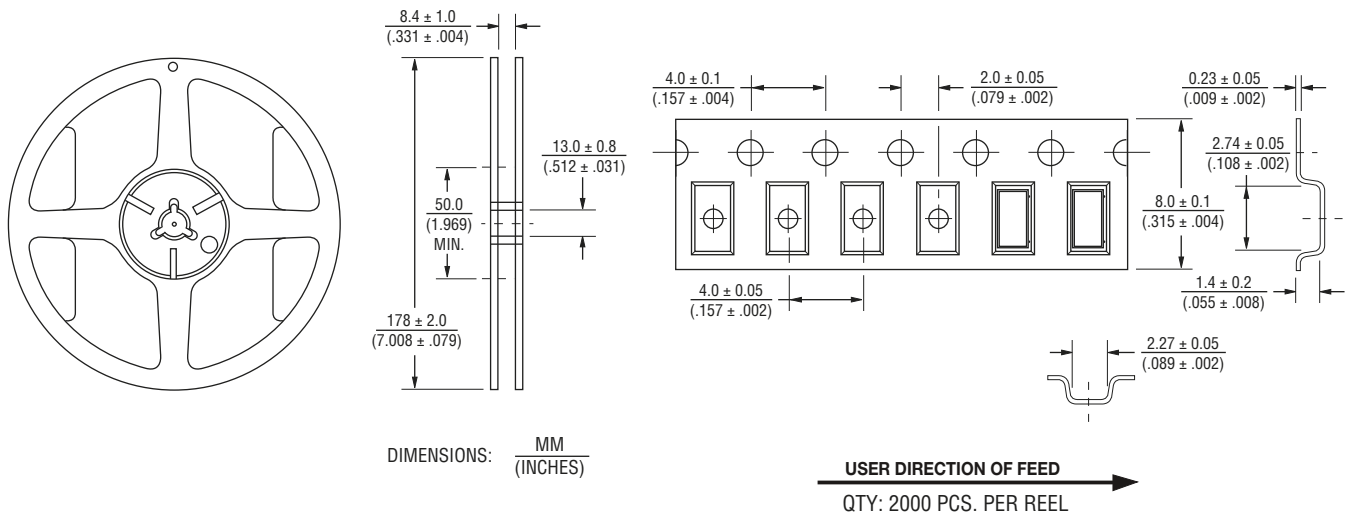
# SRN2508A Series - Semi-shielded Power Inductors

**BOURNS®**

## Soldering Profile



## Packaging Specifications



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