



## Features

- Semi-shielded construction
- Inductance range: 0.90 to 100  $\mu$ H
- Rated current up to 4.6 A
- RoHS compliant\* and halogen free\*\*

## Applications

- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cellphones
- Televisions, LCD displays

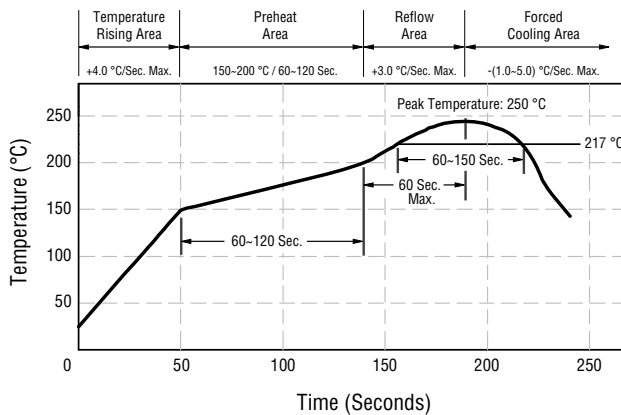
# SRN6028 Series - Semi-shielded Power Inductors

## Electrical Specifications @ 25 °C

Bourns Part No.	Inductance @ 100 KHz / 1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	Isat (A)
	L ( $\mu$ H)	Tol. %						
SRN6028-R90Y	0.90	30	12	7.96	105	0.017	4.6	6.7
SRN6028-1R5Y	1.5	30	12	7.96	70	0.021	4.2	5.1
SRN6028-2R2Y	2.2	30	12	7.96	56	0.026	3.7	4.2
SRN6028-3R0Y	3.0	30	12	7.96	46	0.03	3.4	3.6
SRN6028-3R3M	3.3	20	12	7.96	42	0.034	3.4	3.6
SRN6028-3R9M	3.9	20	10	7.96	35	0.038	3.0	2.7
SRN6028-4R7M	4.7	20	10	7.96	34	0.038	3.0	2.7
SRN6028-6R0M	6.0	20	10	7.96	28	0.048	2.5	2.5
SRN6028-6R2M	6.2	20	10	7.96	28	0.063	2.2	2.2
SRN6028-6R8M	6.8	20	10	7.96	27	0.063	2.2	2.2
SRN6028-100M	10	20	18	2.52	20	0.078	1.9	1.9
SRN6028-150M	15	20	14	2.52	17	0.114	1.8	1.6
SRN6028-220M	22	20	18	2.52	14	0.162	1.4	1.3
SRN6028-330M	33	20	11	2.52	10	0.264	1.1	1.1
SRN6028-470M	47	20	11	2.52	9	0.36	0.92	1.0
SRN6028-680M	68	20	11	2.52	7	0.51	0.77	0.8
SRN6028-101M	100	20	16	0.796	6	0.72	0.66	0.65

## Soldering Profile

Peak Temperature: 250 °C max.  
 Max. Peak Temperature -5 °C: 30 sec. max.  
 Max. Time Above 217 °C: 60-150 sec. max.



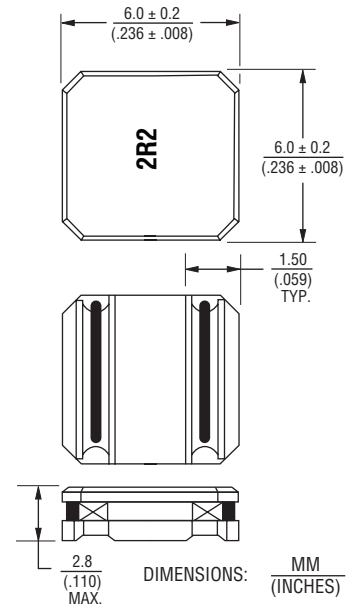
## General Specifications

Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .... -10 °C to +40 °C  
 Resistance to Solder Heat  
 ..... +260 °C for 10 sec.  
 Temperature Rise ..... 40 °C at rated I<sub>rms</sub>  
 Rated Current  
 ..... Inductance drops 30 % at Isat  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

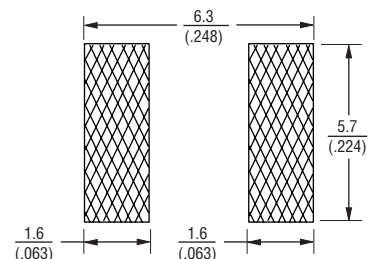
## Materials

Core ..... Ferrite  
 Wire ..... Enameled copper  
 Terminal Finish ..... Sn/Ag/Cu  
 Coating ..... Magnetic epoxy resin  
 Packaging ..... 1000 pcs. per 13-inch reel

## Product Dimensions



## Recommended Layout



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

\* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

\*\*Bourns follows the prevailing definition of "halogen free" in the industry. 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.

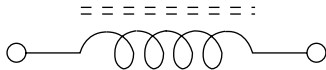
Users should verify actual device performance in their specific applications.

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# SRN6028 Series - Semi-shielded Power Inductors

**BOURNS®**

## Electrical Schematic

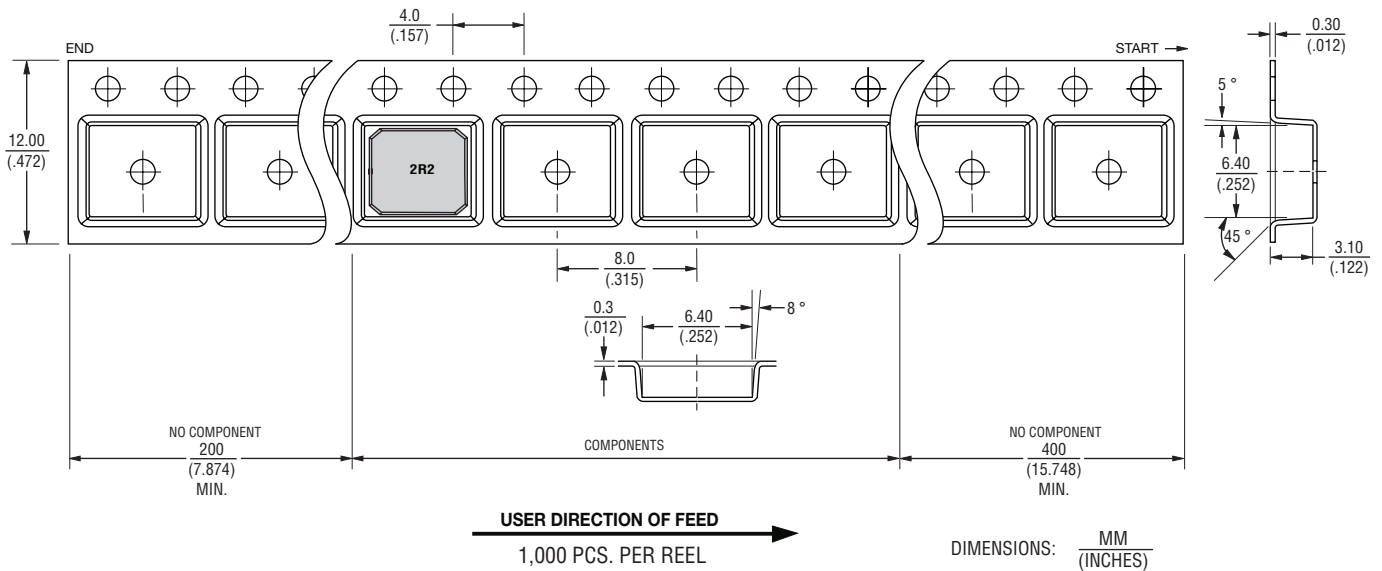
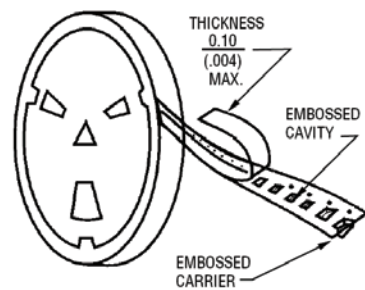
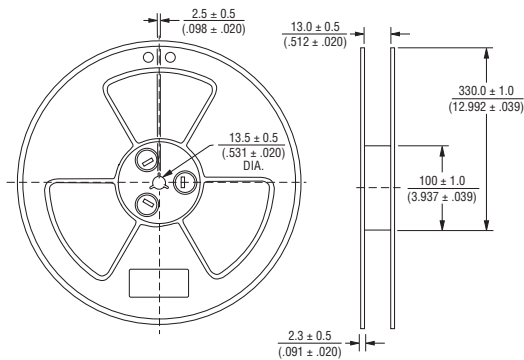


## How to Order

**SRN6028 - 4R7M**

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

## Packaging Specifications



REV. 04/20

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