



## 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

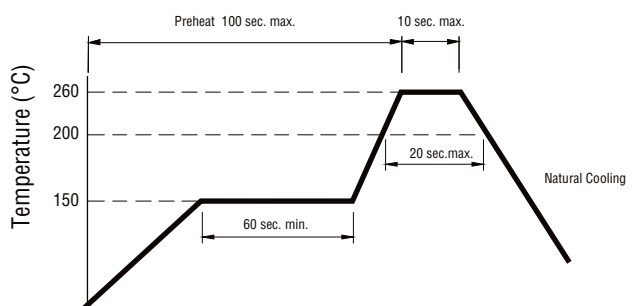
- DC/DC converters
- Notebook computers
- Digital video cameras
- HDDs
- Cellphones
- Televisions, LCD displays

# SRN6028 Series - Semi-shielded Power Inductors

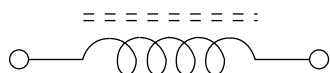
## Electrical Specifications @ 25 °C

| Bourns Part No. | Inductance<br>@ 100 KHz / 1 V |        | Q<br>(Ref.) | Test<br>Freq.<br>(MHz) | SRF<br>(MHz)<br>Typ. | DCR<br>( $\Omega$ )<br>Max. | I <sub>rms</sub><br>(A) | I <sub>sat</sub><br>(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



## Electrical Schematic



## How to Order

Model \_\_\_\_\_ **SRN6028 - 4R7M**  
Value Code (see table) \_\_\_\_\_

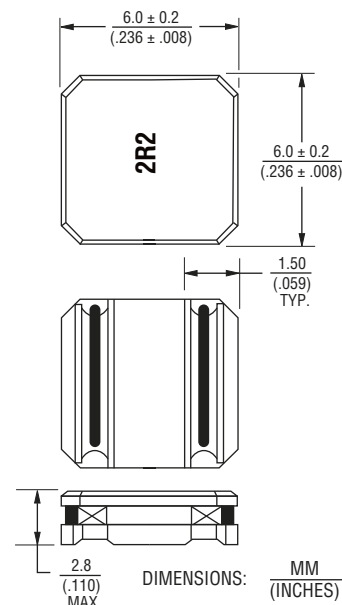
## General Specifications

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 I<sub>sat</sub>  
Moisture Sensitivity Level ..... 1  
ESD Classification (HBM) ..... N/A

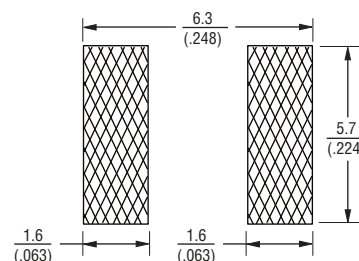
## Materials

Core ..... Ferrite  
Wire ..... Enamelled 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 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

\*\*Bourns considers a product to be (CI) content is 900 ppm or less; and (b) the Chlorine content is 1000 ppm or less. Specifications are subject to change without notice. Applications. The products described herein are for general information only. For specific applications, please refer to their specific data sheets as set forth on <http://www.100y.com.tw>

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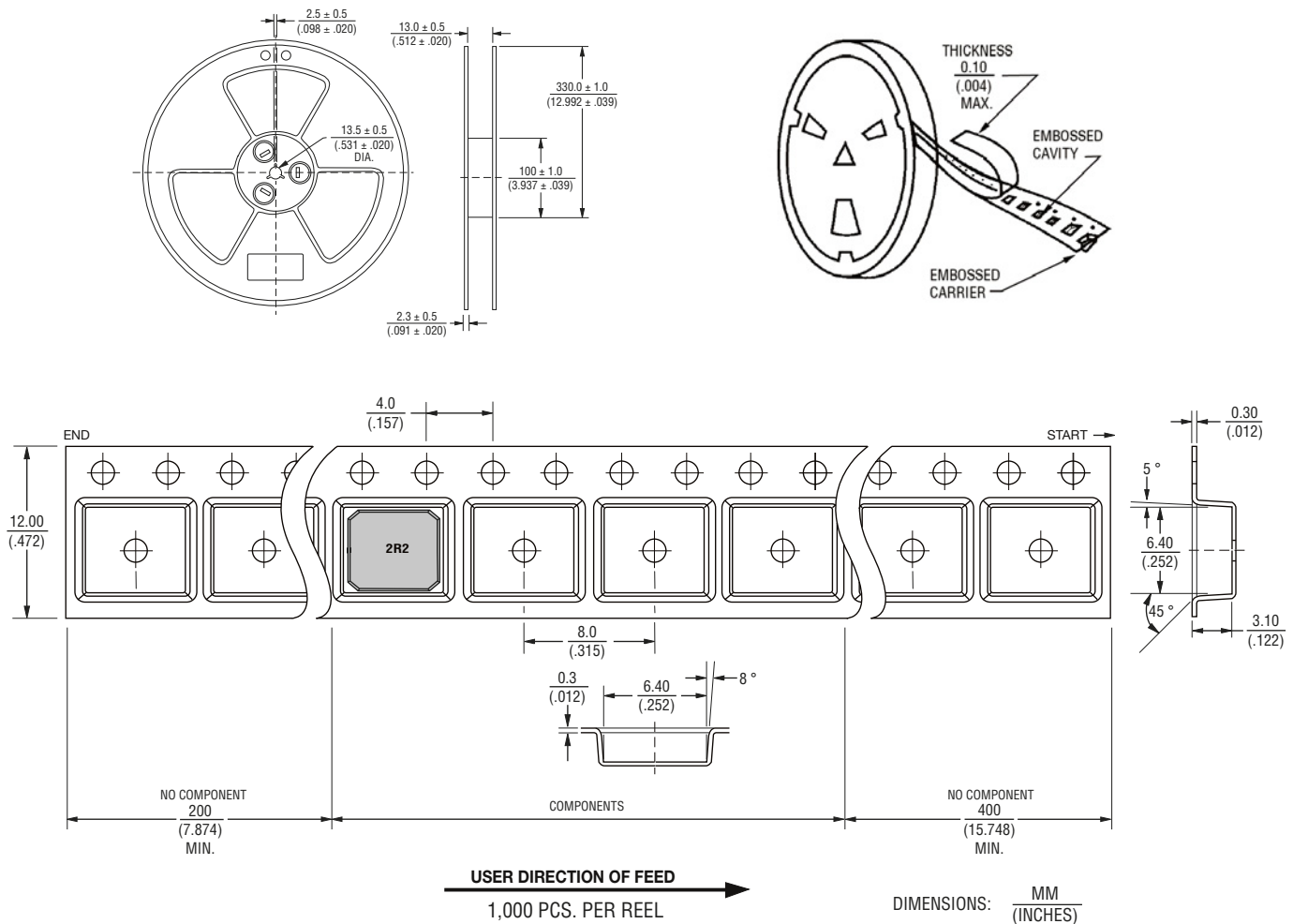
勝特力電子(深圳) 86-755-83298787

<http://www.100y.com.tw>

# SRN6028 Series - Semi-shielded Power Inductors

**BOURNS®**

## Packaging Specifications



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[www.bourns.com](http://www.bourns.com)

REV. 09/17

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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