



**THE DATASHEET OF  
SRU1063-101Y**





## Features

- Maximum height of 6.7 mm
- Current up to 8 A
- RoHS compliant\*

## Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

# SRU1063 Series - Shielded SMD Power Inductors

## Electrical Specifications

| Bourns Part Number | Inductance @ 100 KHz |          | Q Ref. | Test Freq. (MHz) | SRF Typ. (MHz) | RDC Max. (mΩ) | I rms Max. (A) | I sat Typ. (A) | **K-Factor |
|--------------------|----------------------|----------|--------|------------------|----------------|---------------|----------------|----------------|------------|
|                    | L (μH)               | Tol. (%) |        |                  |                |               |                |                |            |
| SRU1063-1R6Y       | 1.6                  | ±30      | 13     | 7.96             | 65             | 9             | 8.00           | 10.00          | 133        |
| SRU1063-2R2Y       | 2.2                  | ±30      | 10     | 7.96             | 65             | 11            | 7.50           | 8.50           | 95         |
| SRU1063-4R7Y       | 4.7                  | ±30      | 11     | 7.96             | 30             | 14            | 5.50           | 5.70           | 68         |
| SRU1063-100Y       | 10                   | ±30      | 14     | 2.52             | 18             | 38            | 3.80           | 4.00           | 49         |
| SRU1063-150Y       | 15                   | ±30      | 12     | 2.52             | 14             | 42            | 3.20           | 3.40           | 41         |
| SRU1063-220Y       | 22                   | ±30      | 15     | 2.52             | 10             | 60            | 3.00           | 3.20           | 33         |
| SRU1063-330Y       | 33                   | ±30      | 12     | 2.52             | 8              | 105           | 2.20           | 2.40           | 26         |
| SRU1063-470Y       | 47                   | ±30      | 10     | 2.52             | 6              | 150           | 1.40           | 1.60           | 22         |
| SRU1063-680Y       | 68                   | ±30      | 8      | 2.52             | 5              | 210           | 1.20           | 1.35           | 20         |
| SRU1063-101Y       | 100                  | ±30      | 12     | 2.52             | 4              | 320           | 1.10           | 1.20           | 15         |

\*\*K-Factor: To calculate core flux density,  $B_p$ -p (gauss) =  $K \times L(\mu H) \times \Delta I$  (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

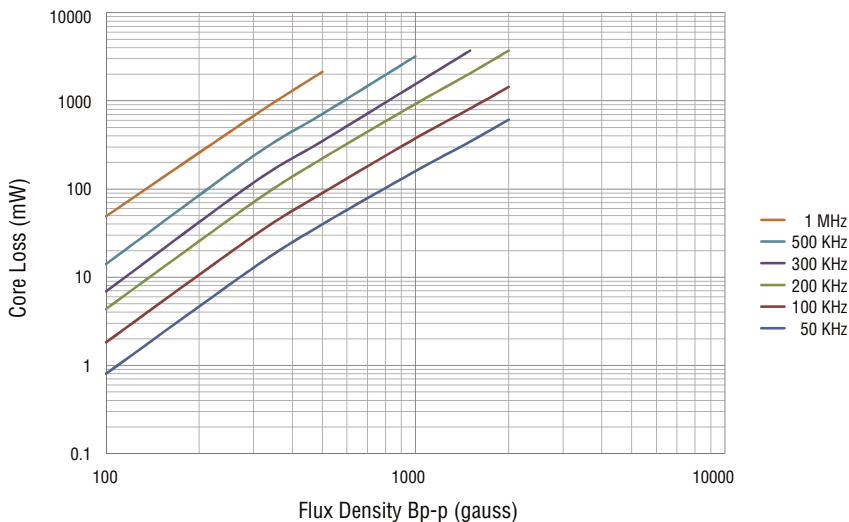
## General Specifications

Test Voltage.....0.1 V  
 Reflow Soldering..... 230 °C, 50 sec. max.  
 Operating Temp..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Soldering Heat  
 .....+260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

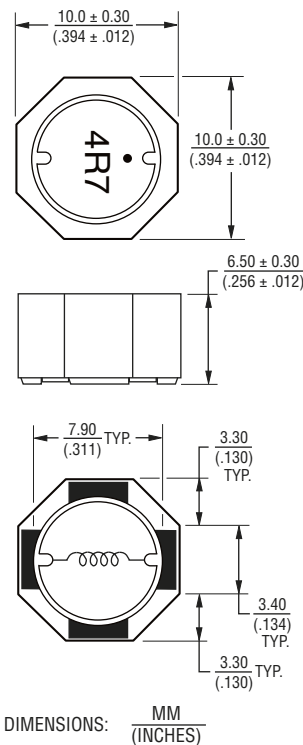
## Materials

Core.....Ferrite DR and RI core  
 Wire .....Enameled copper  
 Terminal.....Ag/Ni/Sn  
 Rated Current...Ind. drop 35 % typ. at Isat  
 Temp. Rise .....40 °C max. at rated I rms  
 Packaging ..... 500 pcs. per reel

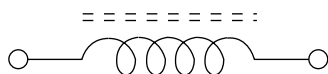
## Core Loss vs. Flux Density



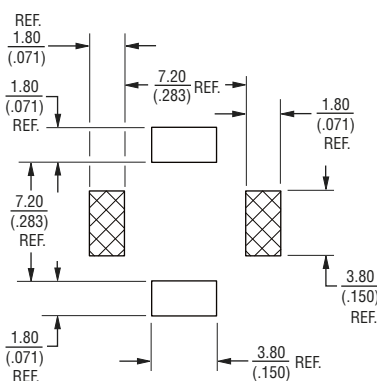
## Product Dimensions



## Electrical Schematic



## Recommended Layout



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

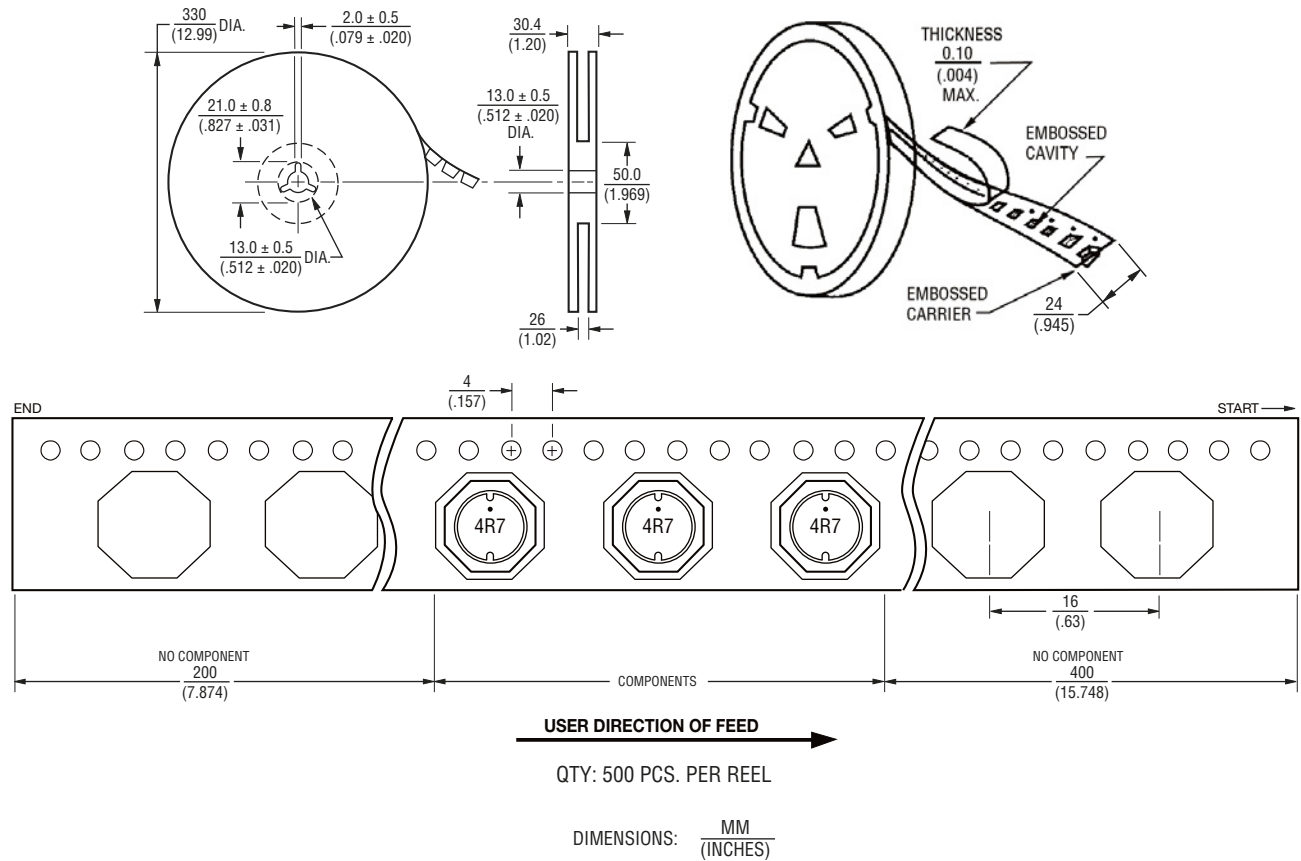
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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# SRU1063 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 03/18

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