



**THE DATASHEET OF  
SRU3014-2R0Y**





## Features

- Maximum height of 1.6 mm
- Current up to 1.85 A
- RoHS compliant\*

## Applications

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

# SRU3014 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. (%)							
SRU3014-1R2Y	1.2	±30	12	7.96	150	55	1.85	1.90	1005
SRU3014-1R5Y	1.5	±30	12	7.96	120	63	1.55	1.60	1005
SRU3014-2R0Y	2.0	±30	10	7.96	110	95	1.10	1.30	795
SRU3014-3R0Y	3.0	±30	12	7.96	80	135	1.00	1.10	655
SRU3014-4R7Y	4.7	±30	15	7.96	70	165	0.82	0.92	558
SRU3014-6R8Y	6.8	±30	10	7.96	50	230	0.70	0.78	457
SRU3014-100Y	10	±30	30	2.52	40	290	0.64	0.66	407
SRU3014-150Y	15	±30	35	2.52	30	550	0.40	0.46	321
SRU3014-220Y	22	±30	35	2.52	25	875	0.32	0.36	264

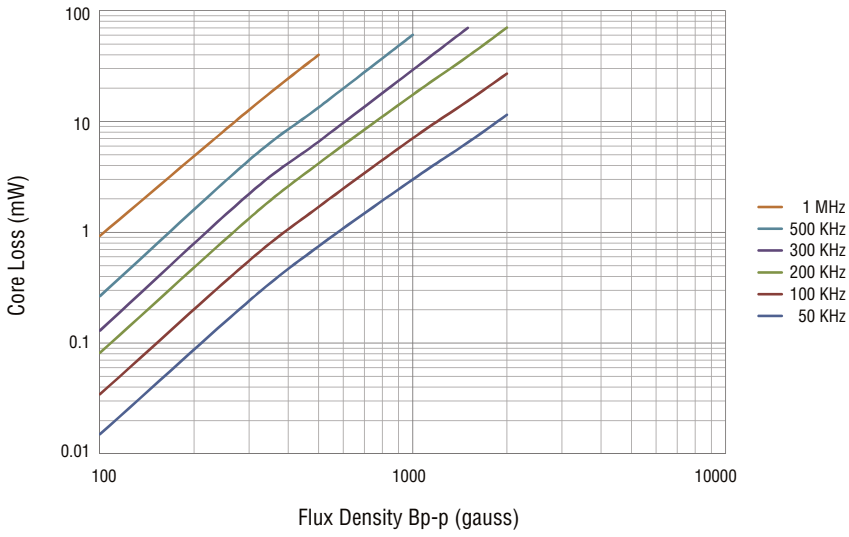
\*\*K-Factor: To calculate core flux density,  $B_{p-p}$  (gauss) =  $K \times L(\mu H) \times \Delta I$  (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

## General Specifications

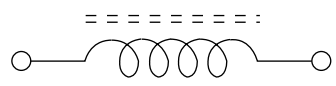
Test Voltage ..... 0.1 V  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +125 °C  
 Resistance to Soldering Heat ..... +260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (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  
 Temperature Rise ..... 40 °C max. at rated Irms  
 Packaging ..... 1,200 pcs. per reel

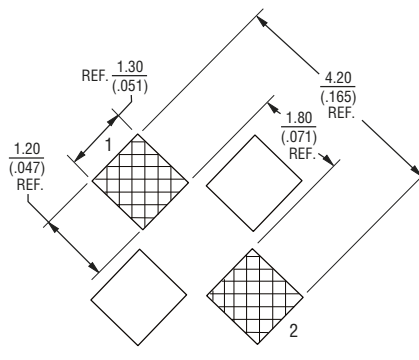
## Core Loss vs. Flux Density



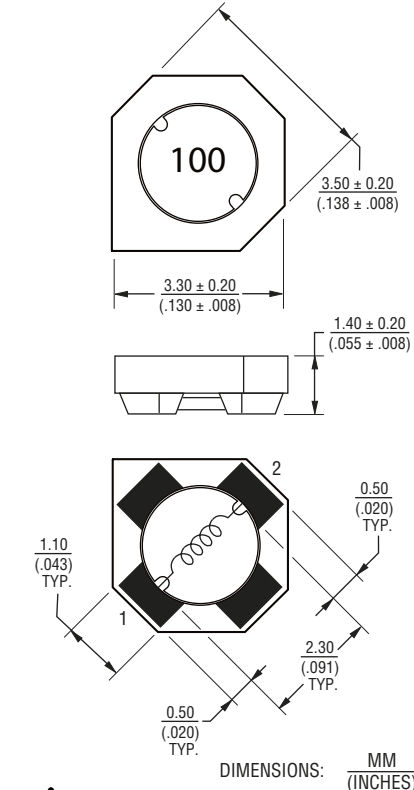
## Electrical Schematic



## Recommended Layout



## Product Dimensions



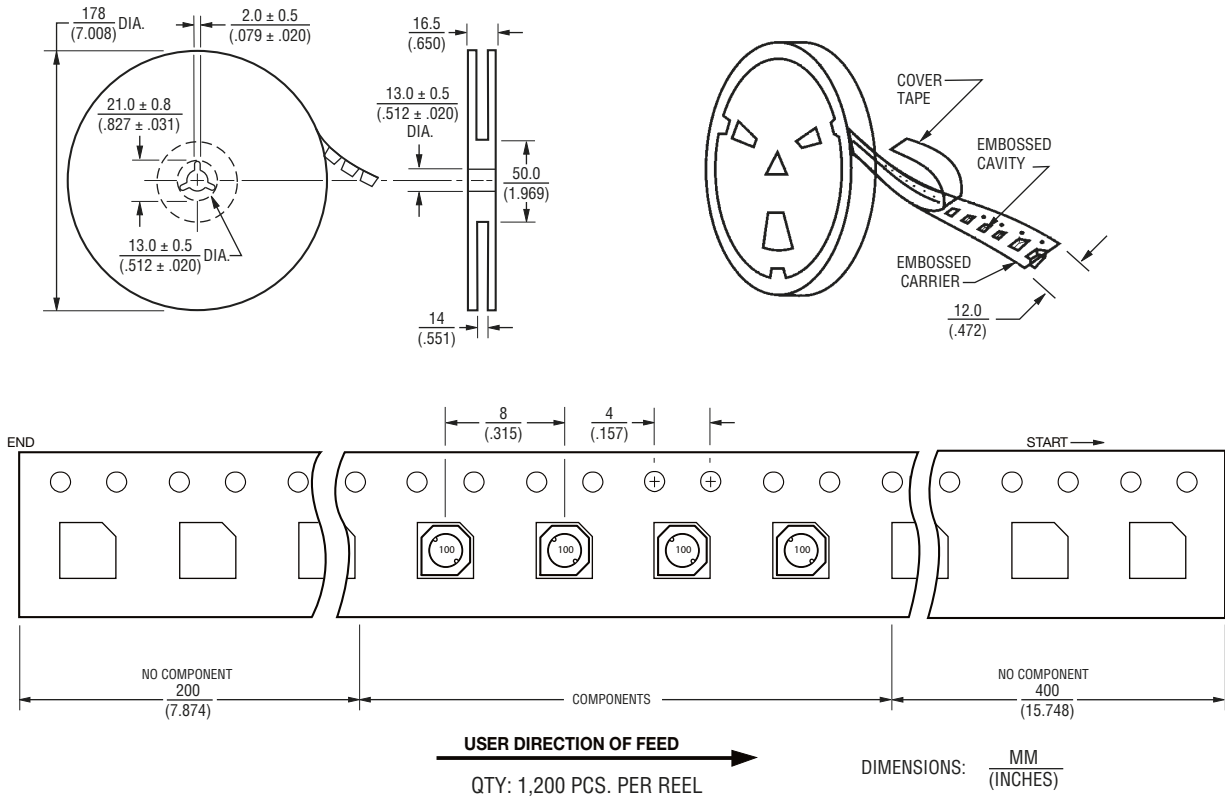
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at [www.bourns.com/docs/legal/disclaimer.pdf](http://www.bourns.com/docs/legal/disclaimer.pdf)

**WARNING Cancer and Reproductive Harm**  
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# SRU3014 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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