



**THE DATASHEET OF  
SRU3014-220Y**





## 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

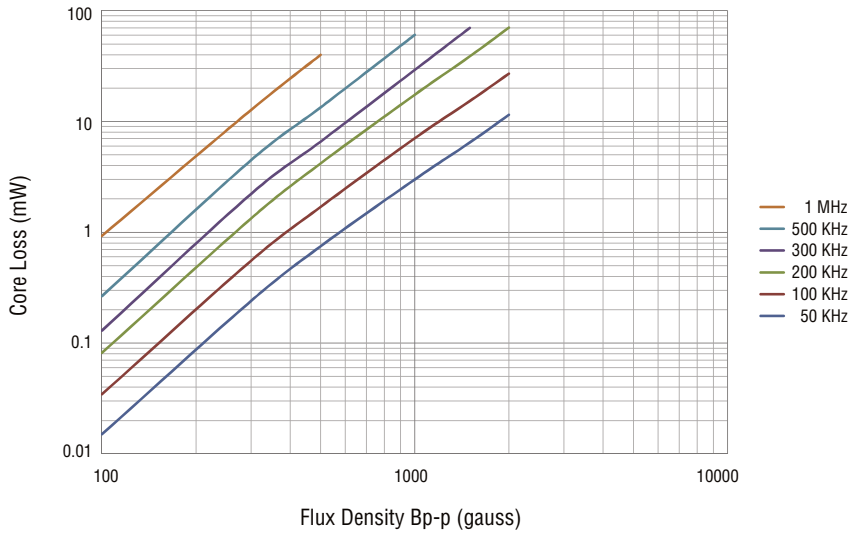
\*\*K-Factor: To calculate core flux density,  $B_{p-p}$  (gauss) =  $K \times L(\mu H) \times \Delta I$  (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

## General Specifications

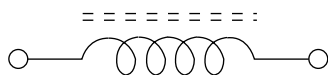
Test Voltage ..... 0.1 V  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temperature ..... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature ..... -40 °C to +125 °C  
 Resistance to Soldering Heat ..... +260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification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

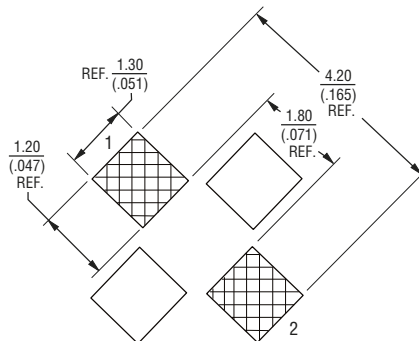


## Electrical Schematic

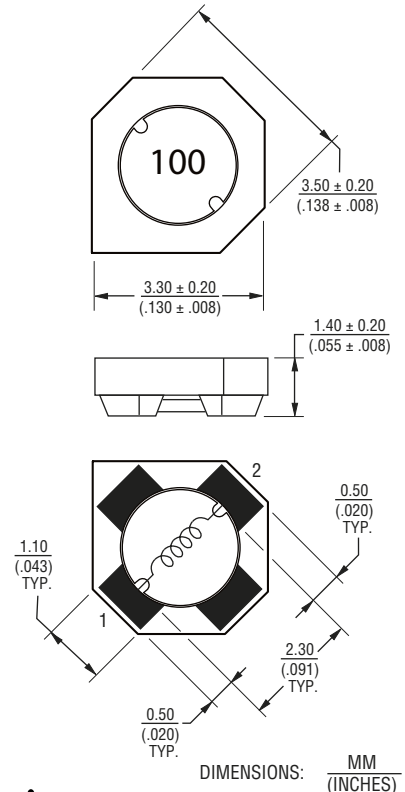


\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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## Recommended Layout



## Product Dimensions

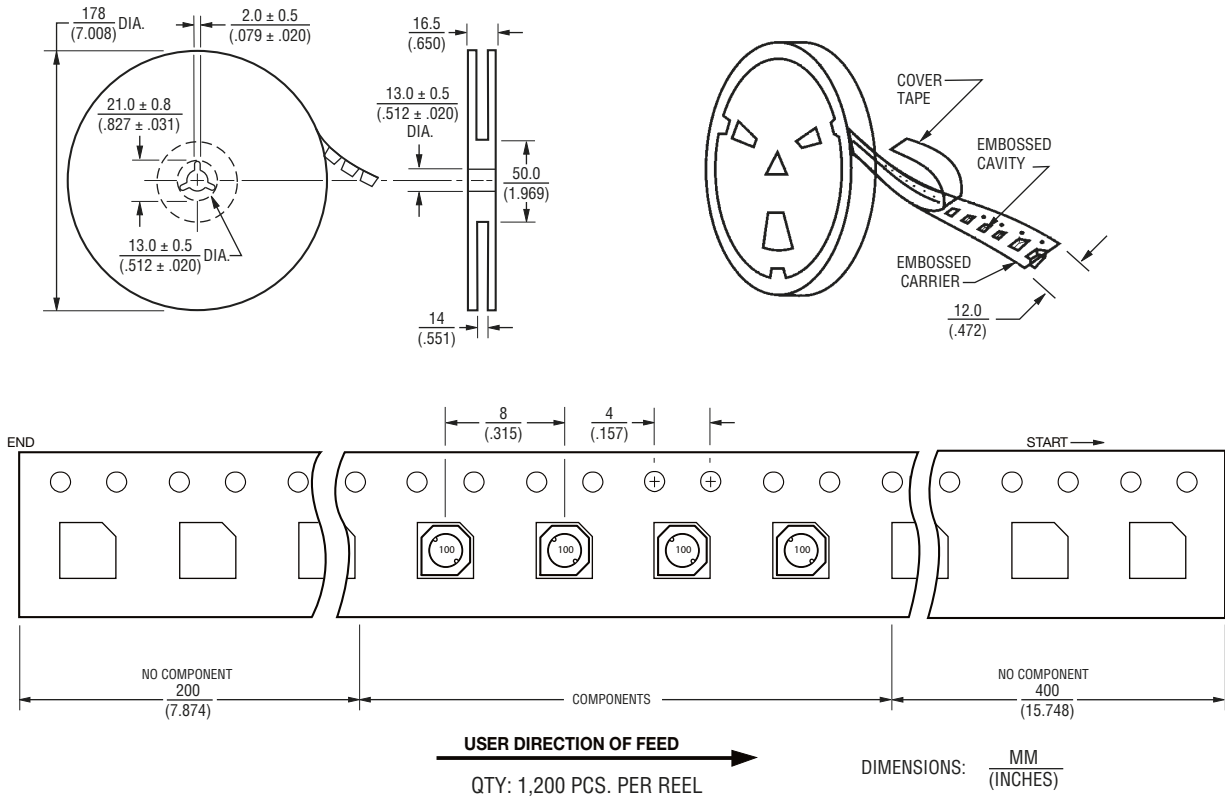


**WARNING** Cancer and Reproductive Harm  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# SRU3014 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 03/18

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