



### 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
  - Car radios

## 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.

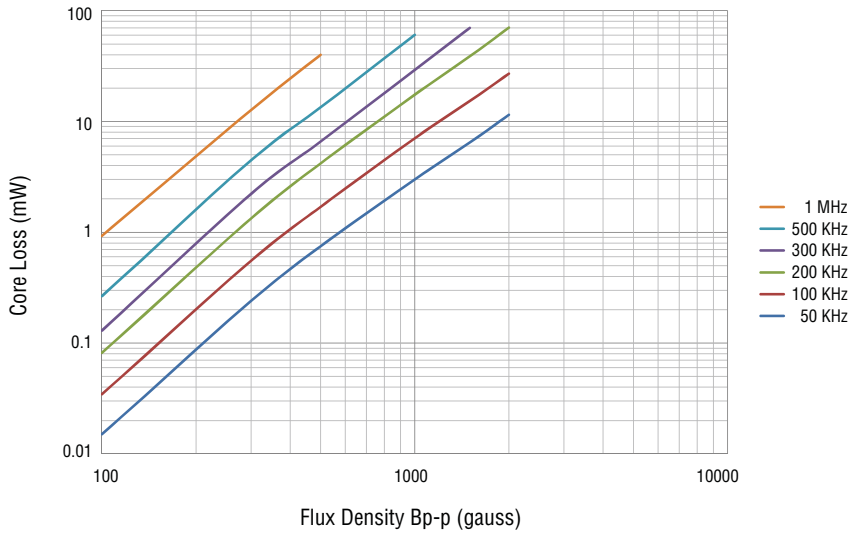
### General Specifications

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.

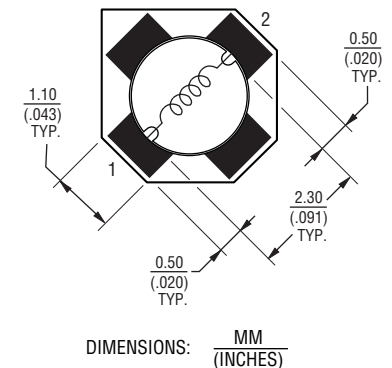
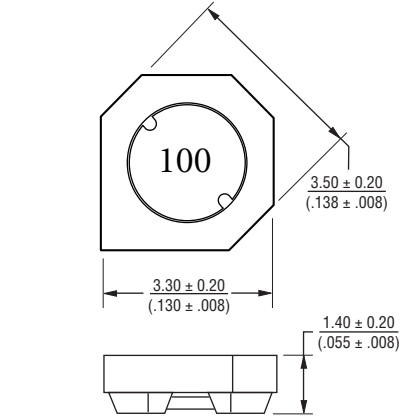
### Materials

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 I rms  
 Packaging ..... 1,200 pcs. per reel

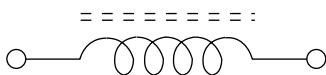
### Core Loss vs. Flux Density



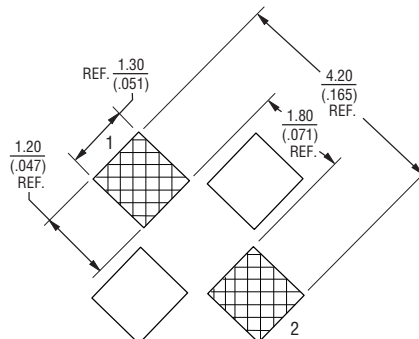
### Product Dimensions



### Electrical Schematic



### Recommended Layout

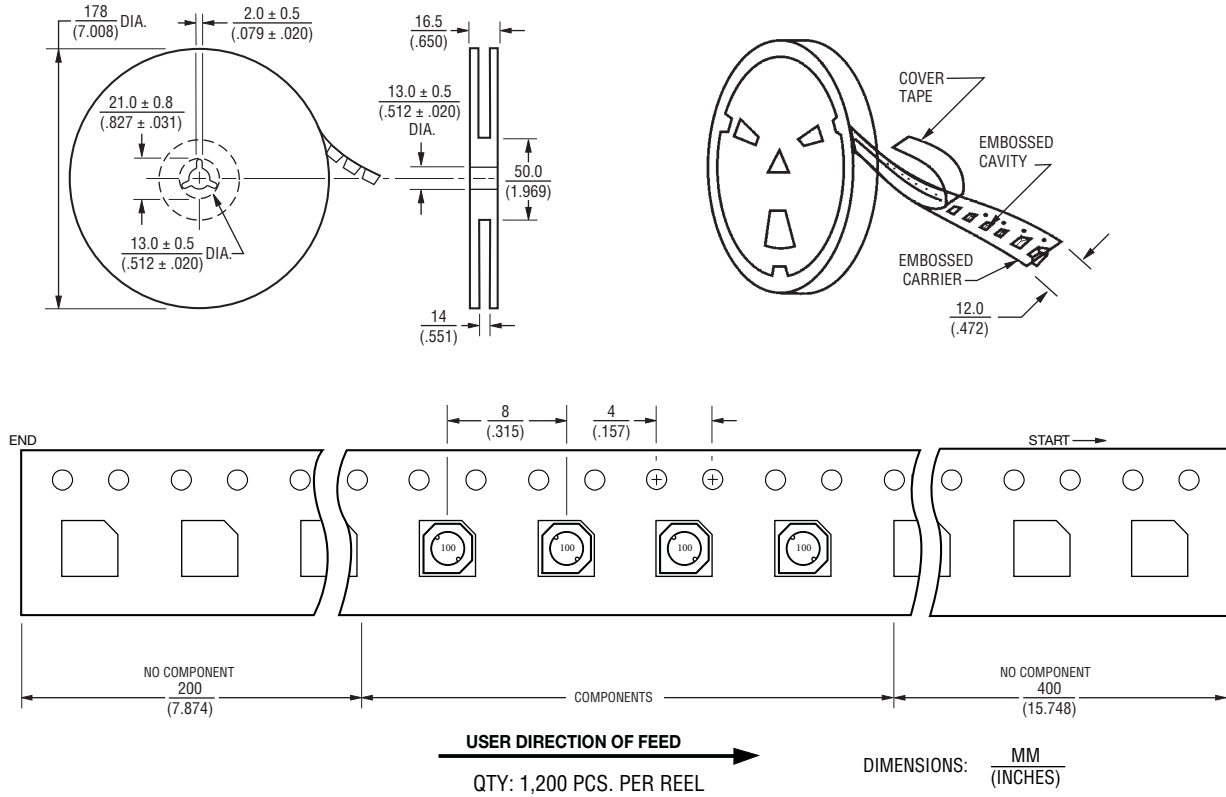


\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

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**BOURNS®**

## Packaging Specifications



REV. 11/13

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