



## Features

- Maximum height of 1.8 mm
- Current up to 2.2 A
- RoHS compliant\*

## Applications

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

# SRU2016 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I <sub>rms</sub> Max. (A)	I <sub>sat</sub> Typ. (A)	Marking	**K-Factor
	(μH)	Tol. %								
SRU2016-1R0Y	1.0	±30	8	7.96	250	60	2.20	1.60	A	2170
SRU2016-2R2Y	2.2	±30	8	7.96	120	105	1.60	1.00	C	1485
SRU2016-3R0Y	3.0	±30	8	7.96	90	135	1.50	0.87	E	1227
SRU2016-4R7Y	4.7	±30	8	7.96	80	215	1.15	0.74	F	973
SRU2016-6R0Y	6.0	±30	9	7.96	70	250	0.90	0.63	G	855
SRU2016-100Y	10	±30	9	2.52	45	430	0.87	0.52	H	627
SRU2016-150Y	15	±30	10	2.52	40	650	0.60	0.40	I	514
SRU2016-220Y	22	±30	12	2.52	30	990	0.43	0.37	J	448
SRU2016-330Y	33	±30	12	2.52	20	1470	0.41	0.29	K	376
SRU2016-470Y	47	±30	15	2.52	20	1650	0.31	0.22	L	303
SRU2016-680Y	68	±30	18	2.52	15	3510	0.22	0.17	M	233
SRU2016-101Y	100	±30	8	2.52	10	4900	0.19	0.15	N	209

\*\*K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

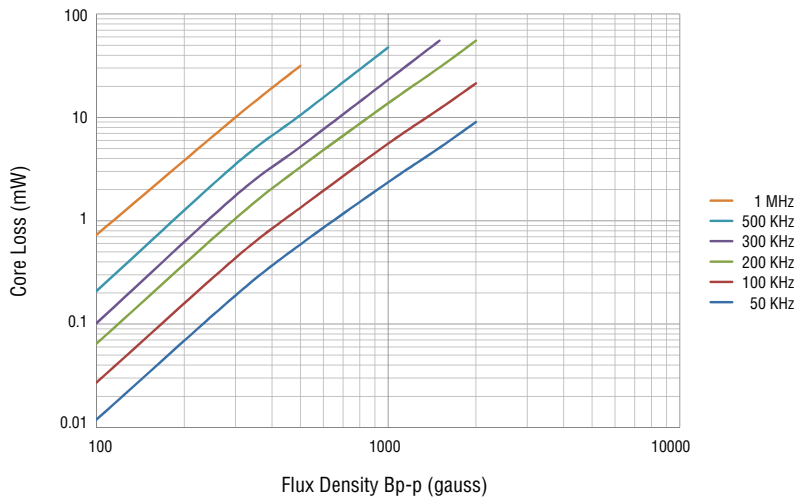
## General Specifications

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

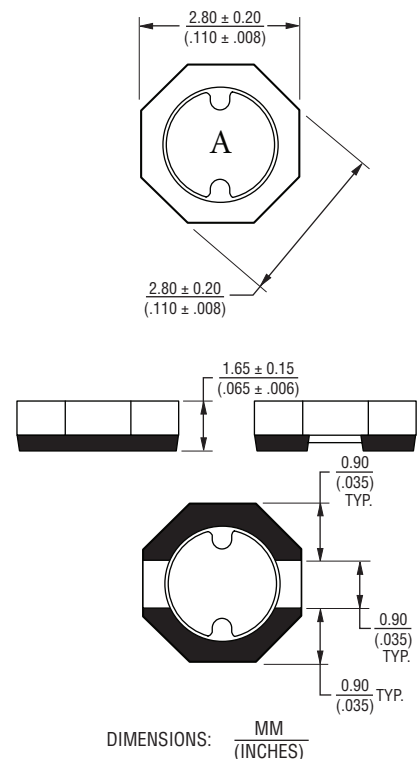
## Materials

Core ..... Ferrite DR and RI core  
 Wire ..... Enameled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current ..... Ind. drop 35 % typ. at I<sub>sat</sub>  
 Temperature Rise ..... 40 °C max. at rated I<sub>rms</sub>  
 Packaging ..... 1,000 pcs. per reel

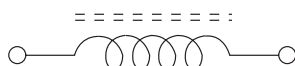
## Core Loss vs. Flux Density



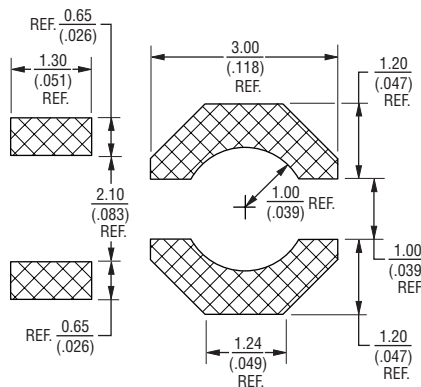
## Product Dimensions



## Electrical Schematic



## Recommended Layout

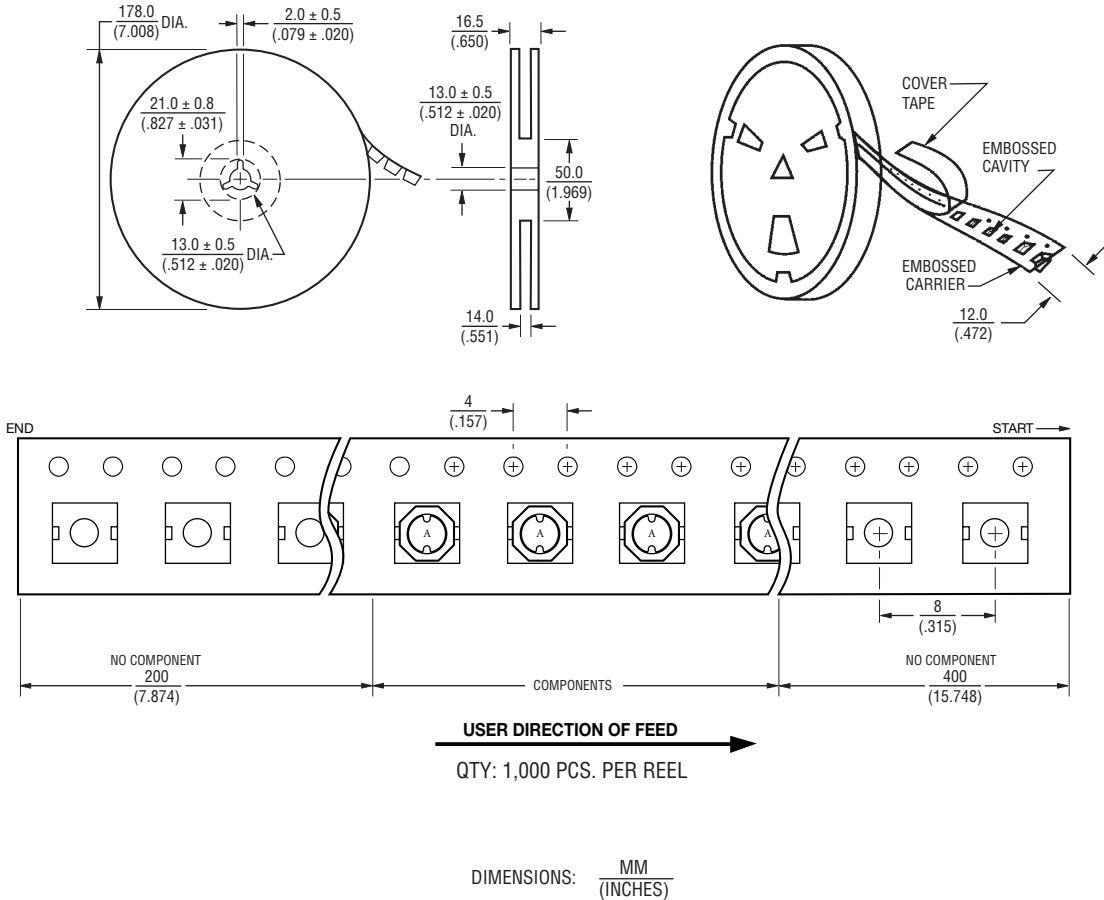


\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.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

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**BOURNS®**

## Packaging Specifications



REV. 03/18

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