



**THE DATASHEET OF  
SRU2013-4R7Y**





## Features

- Maximum height of 1.5 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

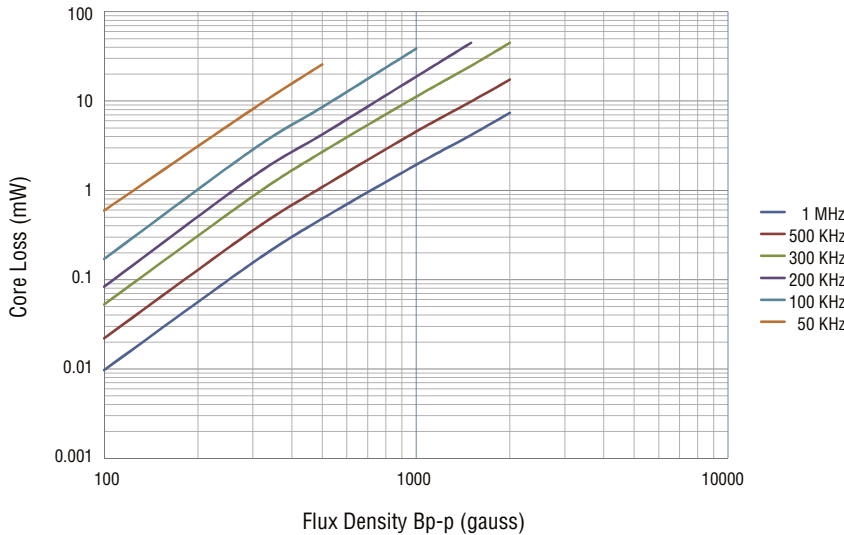
# SRU2013 Series - Shielded SMD Power Inductors

## Electrical Specifications

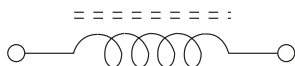
Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	Irms Max. (A)	Isat Typ. (A)	Marking	**K-Factor
	(μH)	Tol. %								
SRU2013-1R0Y	1.0	±30	9	7.96	180	65	2.20	1.60	A	2418
SRU2013-2R2Y	2.2	±30	10	7.96	100	120	1.45	0.95	C	1497
SRU2013-3R3Y	3.3	±30	10	7.96	80	135	1.00	0.86	E	1258
SRU2013-4R7Y	4.7	±30	10	7.96	72	220	0.90	0.75	F	1014
SRU2013-6R8Y	6.8	±30	10	7.96	60	330	0.80	0.60	G	898
SRU2013-100Y	10	±30	12	2.52	40	520	0.67	0.45	H	731
SRU2013-150Y	15	±30	12	2.52	30	850	0.46	0.40	I	593
SRU2013-220Y	22	±30	12	2.52	25	880	0.40	0.35	J	484
SRU2013-330Y	33	±30	12	2.52	20	1820	0.30	0.25	K	398
SRU2013-470Y	47	±30	14	2.52	15	2860	0.25	0.23	L	318

\*\*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.

## Core Loss vs. Flux Density

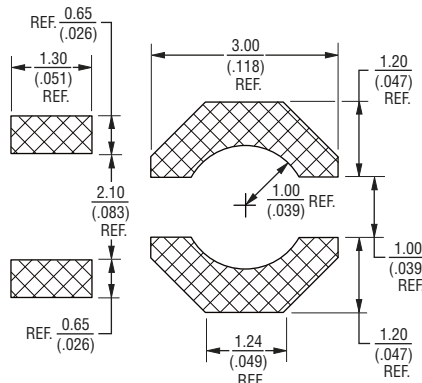


## Electrical Schematic



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

## Recommended Layout



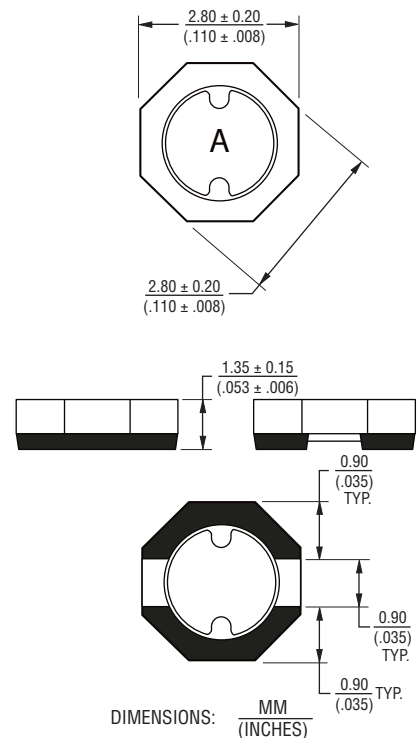
## General Specifications

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  
 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

## Product Dimensions

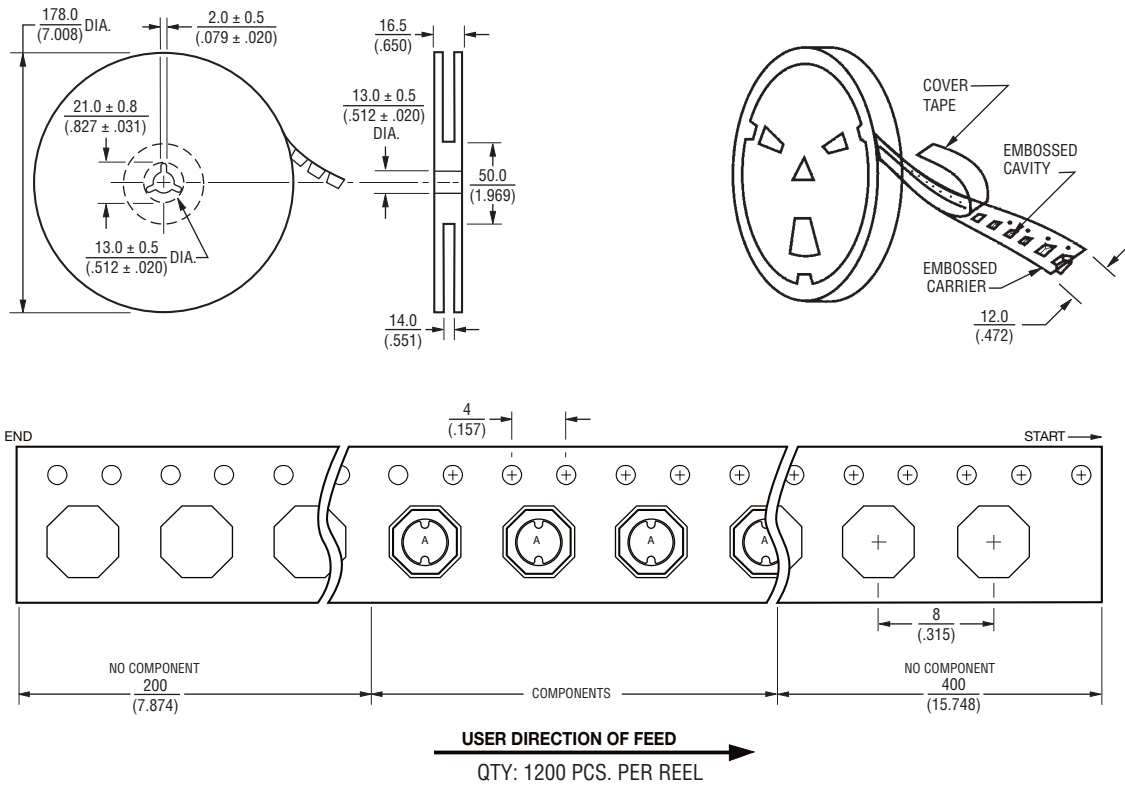


**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

# SRU2013 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

REV. 03/18

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-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management