



## Features

- Available in E6 series
- Unit height of 1.1 mm
- Current up to 1.1 A
- RoHS compliant\*

## Applications

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

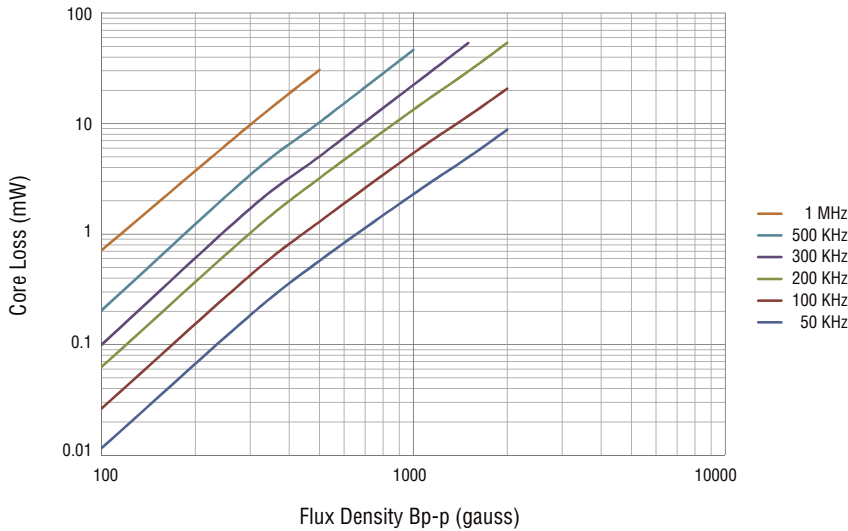
# SRU3011 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC (mΩ)	Irms Max. (A)	Isat Typ. (A)	Marking	**K-Factor
	(μH)	Tol. %								
SRU3011-1R5Y	1.5	±30	7	7.96	180	57	1.10	1.00	A	1698
SRU3011-2R2Y	2.2	±30	7	7.96	150	80	0.92	0.90	B	1498
SRU3011-3R3Y	3.3	±30	8	7.96	120	116	0.84	0.78	C	1213
SRU3011-4R7Y	4.7	±30	8	7.96	90	178	0.63	0.62	D	943
SRU3011-6R8Y	6.8	±30	7	7.96	85	245	0.50	0.46	E	821
SRU3011-100Y	10.0	±30	8	2.52	60	340	0.40	0.35	F	653

\*\*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.

## Core Loss vs. Flux Density



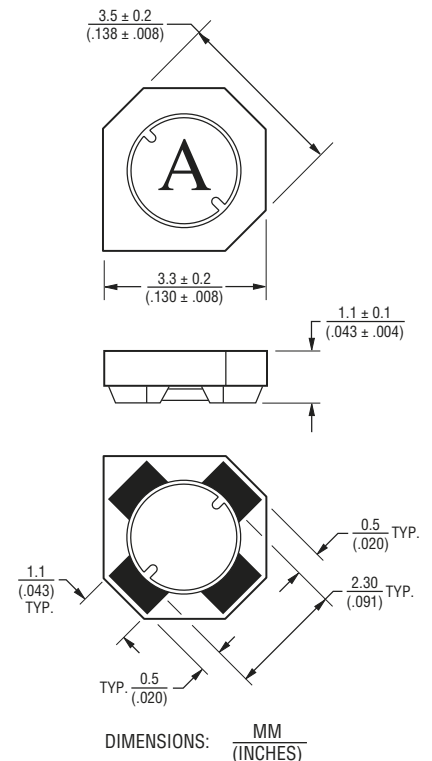
## General Specifications

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

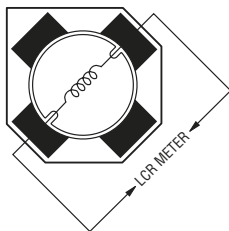
## Materials

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 ..... 1500 pcs. per reel

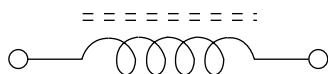
## Product Dimensions



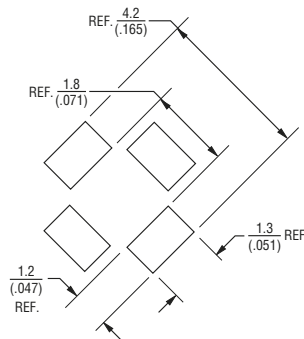
## Inductor Connection



## Electrical Schematic



## Recommended Layout



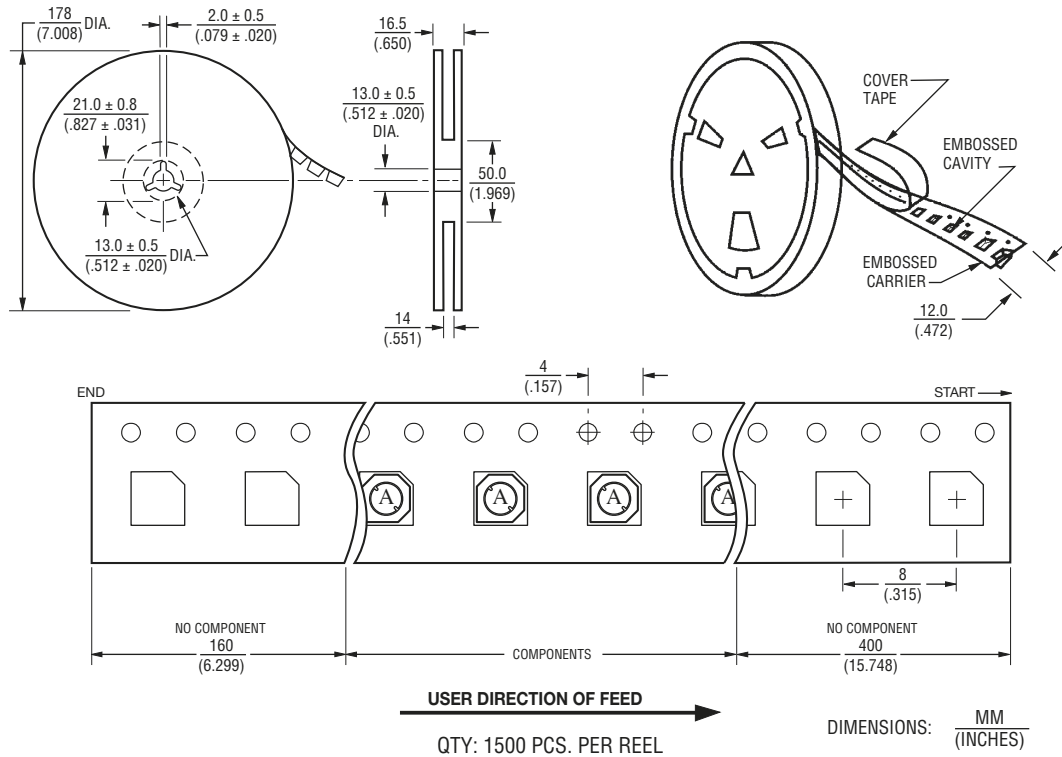
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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).

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**BOURNS®**

## Packaging Specifications



REV. 03/18

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Users should verify actual device performance in their specific applications.

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