



### Features

- Available in E6 series
- Unit height of 2.8 mm
- Current up to 0.72 A
- RoHS compliant\*

### Applications

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

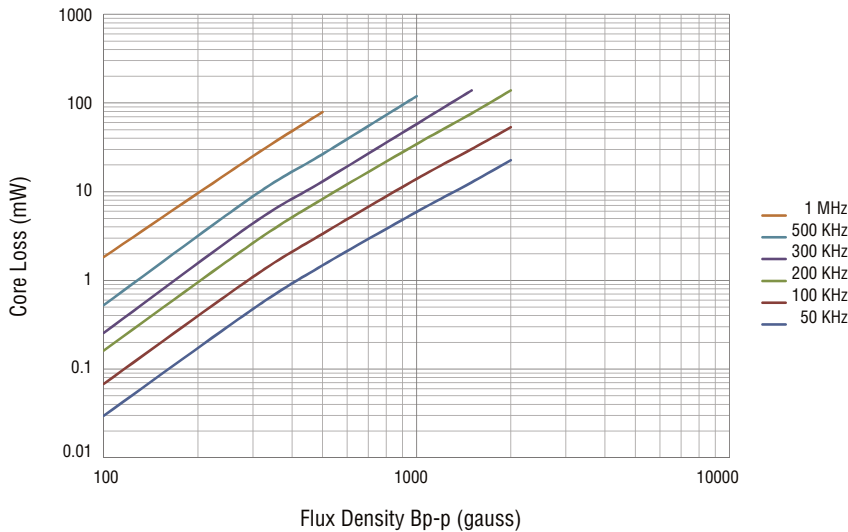
## SRU3028 Series - Shielded SMD Power Inductors

### Electrical Specifications

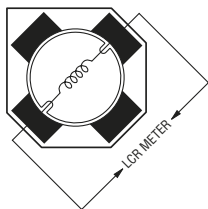
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU3028-100Y	10.0	±30	20	7.96	35	160	0.72	0.86	276
SRU3028-150Y	15.0	±30	18	2.52	25	230	0.66	0.72	241
SRU3028-220Y	22.0	±30	18	2.52	15	270	0.60	0.62	214
SRU3028-330Y	33.0	±30	20	2.52	10	450	0.47	0.48	180
SRU3028-470Y	47.0	±30	20	2.52	8	815	0.32	0.38	133
SRU3028-680Y	68.0	±30	20	2.52	7	1400	0.24	0.28	112
SRU3028-101Y	100.0	±30	20	0.796	5	2200	0.19	0.21	91

\*\*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.

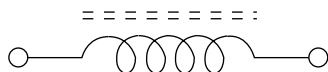
### Core Loss vs. Flux Density



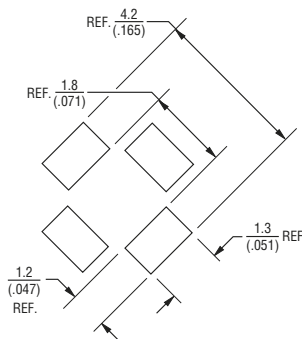
### Inductor Connection



### Electrical Schematic



### Recommended Layout



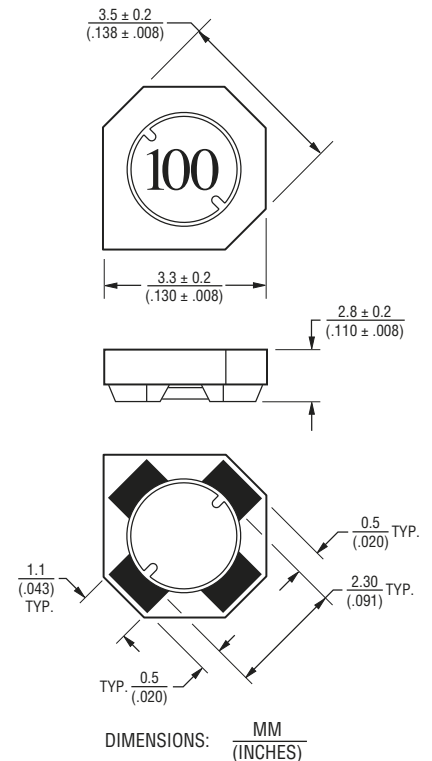
### General Specifications

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  
 Wire ..... Enameled copper (Class F)  
 Terminal ..... Ag/Ni/Sn  
 Rated Current ..... Ind. drop 35 % typ. at Isat  
 Temperature Rise ..... 40 °C max. at rated Irms  
 Packaging ..... 600 pcs. per reel

### Product Dimensions



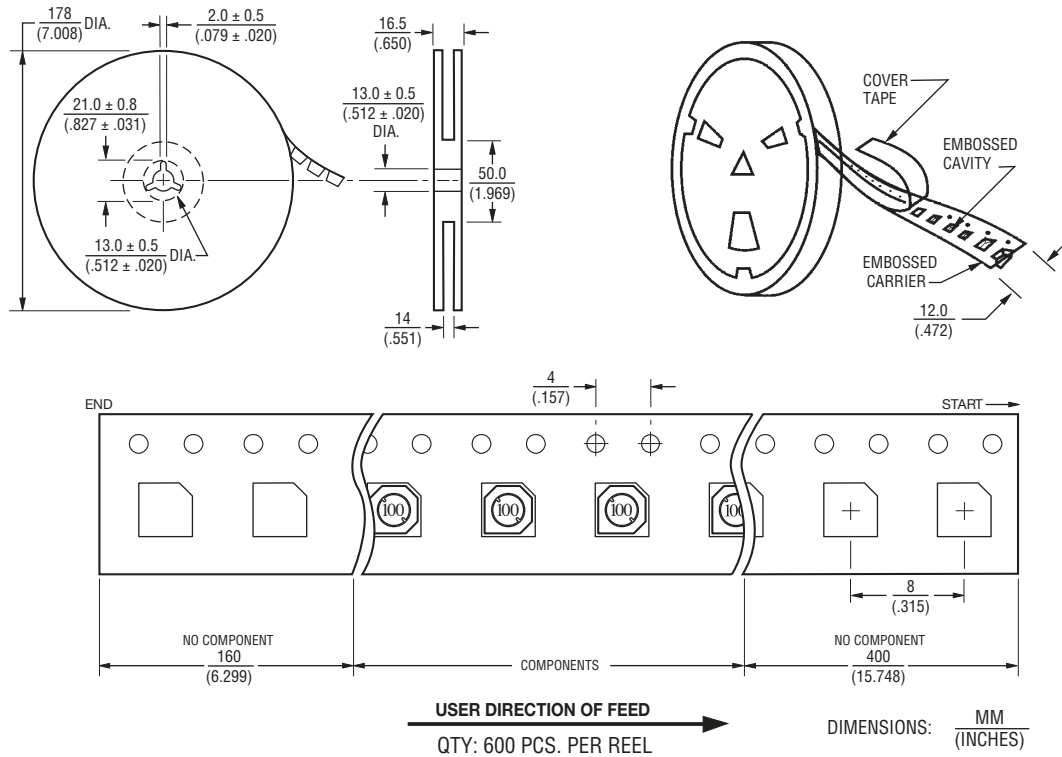
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*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).

# SRU3028 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 03/18

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