



## 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
  - Car radios

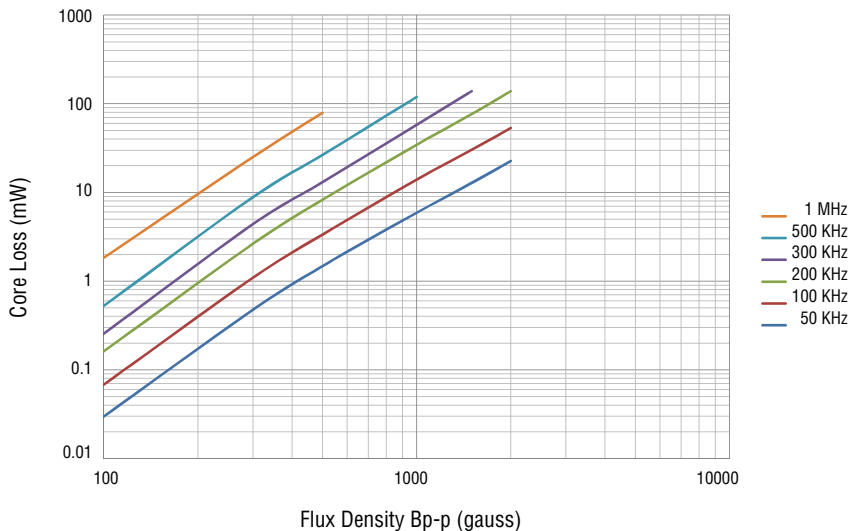
# SRU3028 Series - Shielded SMD Power Inductors

## Electrical Specifications

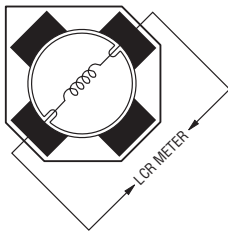
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC (Ω)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU3028-100Y	10.0	±30	20	7.96	35	160	0.72	0.86	276
SRU3028-150Y	15.0	±30	18	2.52	25	230	0.66	0.72	241
SRU3028-220Y	22.0	±30	18	2.52	15	270	0.60	0.62	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,  $B_{p-p}$  (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.

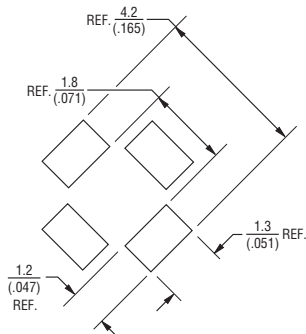
## Core Loss vs. Flux Density



## Inductor Connection



## Recommended Layout



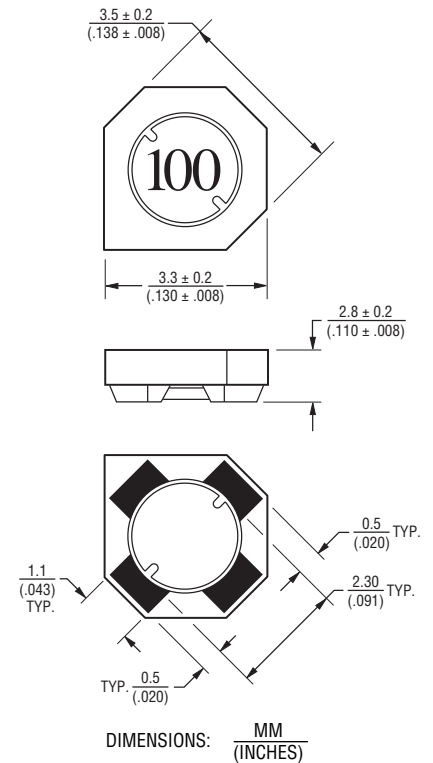
## General Specifications

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.

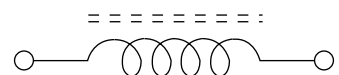
## Materials

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 I rms  
 Packaging ..... 600 pcs. per reel

## Product Dimensions



## Electrical Schematic

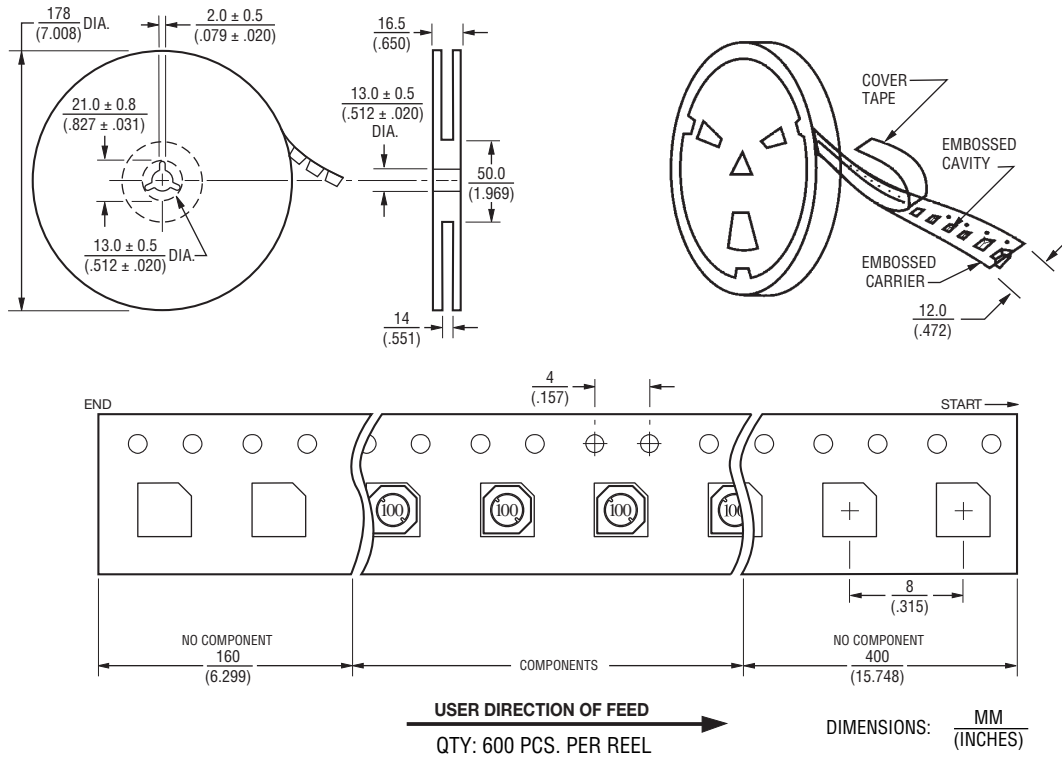


\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.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

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**BOURNS®**

## Packaging Specifications



REV. 11/13

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