



**THE DATASHEET OF  
SRU3017-6R8Y**





### Features

- Available in E6 series
- Unit height of 1.8 mm
- Current up to 1.7 A
- RoHS compliant\*

### Applications

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

## SRU3017 Series - Shielded SMD Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC (mΩ)	I <sub>rms</sub> Max. (A)	I <sub>sat</sub> Typ. (A)	**K-Factor
	(μH)	Tol. %							
SRU3017-2R2Y	2.2	± 30	8	7.96	100	35	1.70	0.98	1238
SRU3017-3R3Y	3.3	± 30	8	7.96	80	55	1.45	0.80	1002
SRU3017-4R7Y	4.7	± 30	10	7.96	60	68	1.10	0.63	842
SRU3017-6R8Y	6.8	± 30	10	7.96	50	85	1.00	0.53	726
SRU3017-100Y	10.0	± 30	15	7.96	40	120	0.85	0.47	601
SRU3017-150Y	15.0	± 30	20	2.52	35	175	0.68	0.35	489
SRU3017-220Y	22.0	± 30	20	2.52	30	250	0.60	0.30	413
SRU3017-330Y	33.0	± 30	20	2.52	20	430	0.47	0.25	324
SRU3017-470Y	47.0	± 30	18	2.52	18	540	0.36	0.21	273

\*\*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.

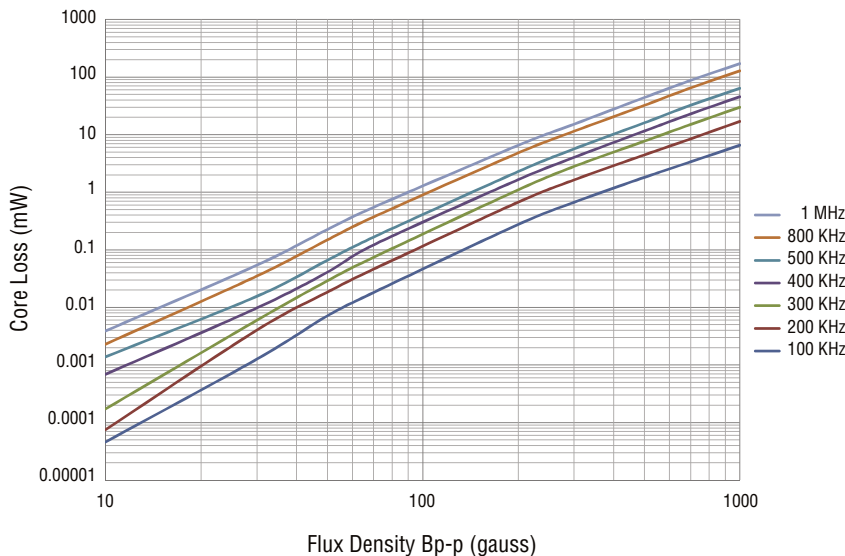
### General Specifications

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.  
 Rated Current ..... Ind. drop 35 % typ. at I<sub>sat</sub>  
 Temp. Rise..... 30 °C max. at rated I<sub>rms</sub>  
 Moisture Sensitivity Level..... 1  
 ESD Classification..... N/A

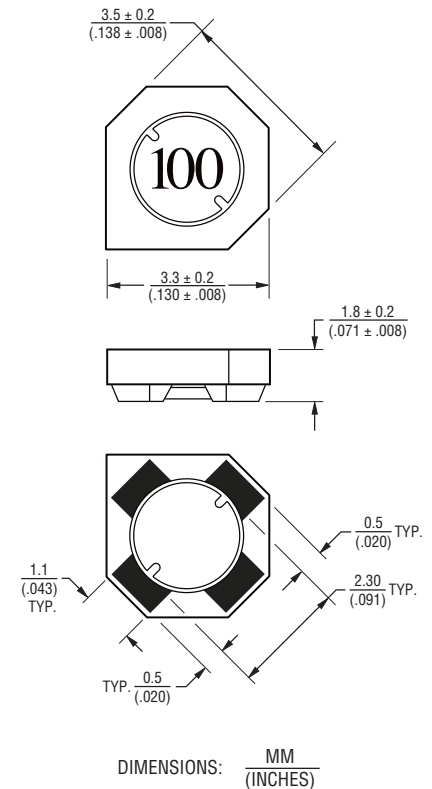
### Materials

Core..... Ferrite DR and RI core  
 Wire ..... Enameled copper (Class F)  
 Terminal ..... Ag/Ni/Sn  
 Packaging..... 800 pcs. per reel

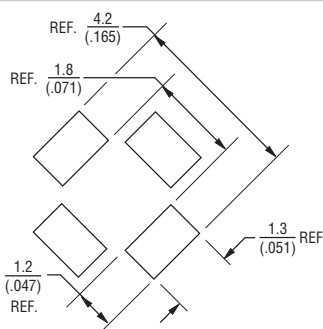
### Core Loss vs. Flux Density



### Product Dimensions



### Recommended Layout



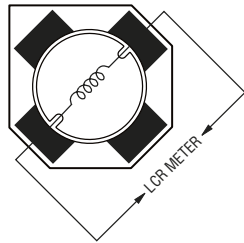
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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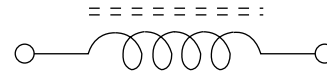
# SRU3017 Series - Shielded SMD Power Inductors

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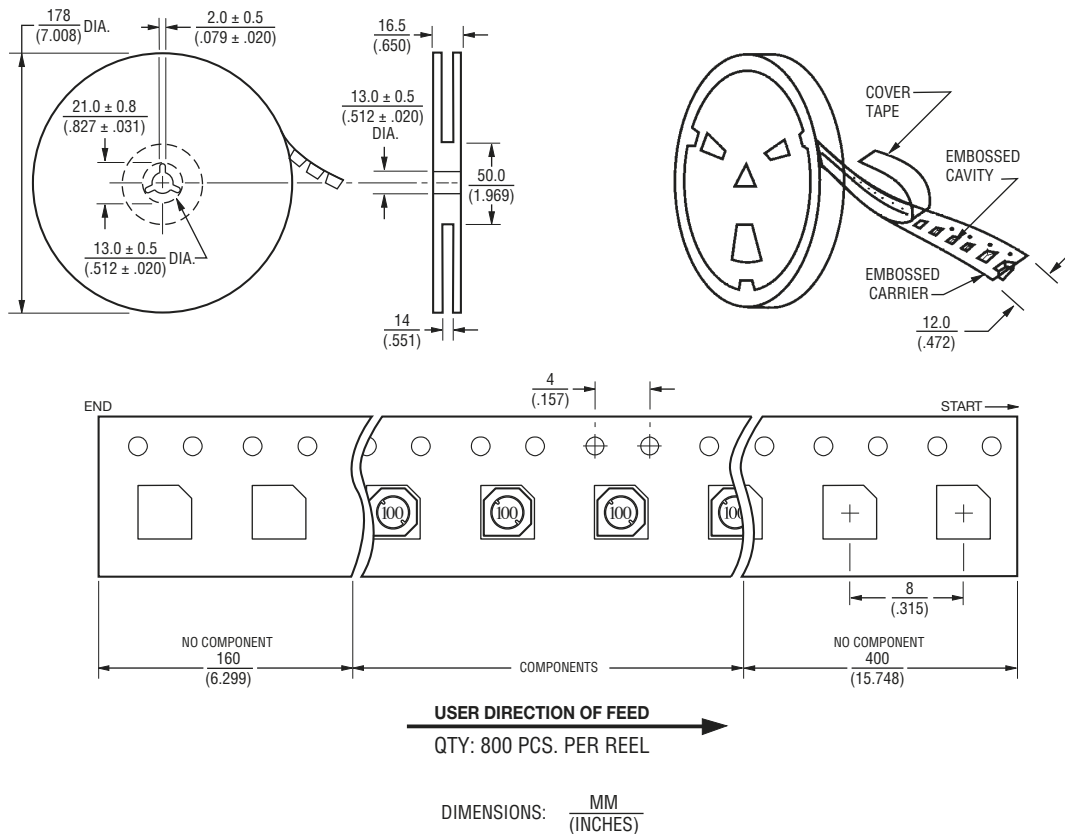
## Inductor Connection



## Electrical Schematic



## Packaging Specifications



REV. 03/18

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