



### Features

- Available in E6 series
- Unit height of 2.8 mm
- Current up to 7 A
- RoHS compliant\*

### Applications

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

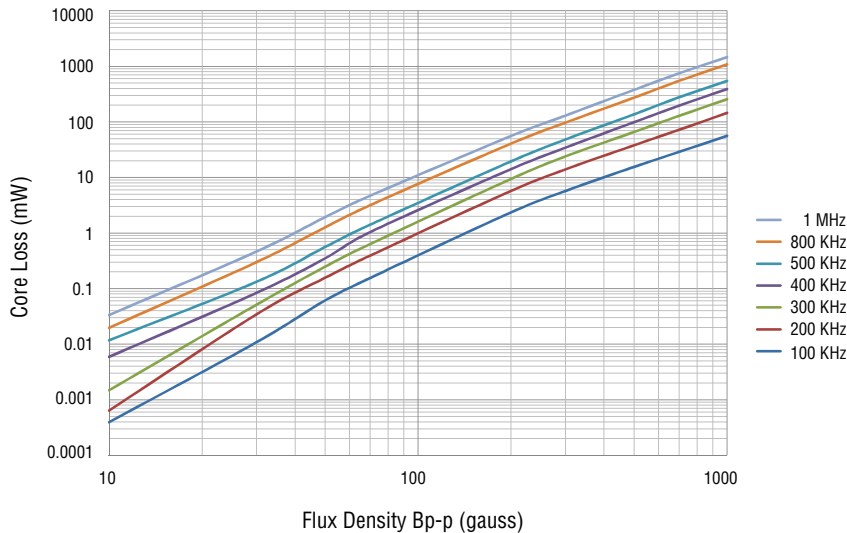
## SRU8028 Series - Shielded SMD Power Inductors

### 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. %							
SRU8028-1R0Y	1.0	±30	12	7.96	66.0	10.1	7.00	5.50	389
SRU8028-2R5Y	2.5	±30	15	7.96	65.0	13.6	4.50	4.20	251
SRU8028-3R3Y	3.3	±30	12	7.96	60.0	17.5	3.60	3.50	222
SRU8028-4R7Y	4.7	±30	15	7.96	50.0	20.0	3.70	3.20	198
SRU8028-6R8Y	6.8	±30	13	7.96	40.0	34.0	2.80	2.50	164
SRU8028-8R2Y	8.2	±30	17	7.96	37.0	54.0	2.60	2.30	143
SRU8028-100Y	10.0	±30	22	2.52	35.0	45.0	2.60	2.20	130
SRU8028-120Y	12.0	±30	21	2.52	30.0	76.0	2.20	2.00	121
SRU8028-150Y	15.0	±30	20	2.52	25.0	66.0	2.00	1.70	108
SRU8028-220Y	22.0	±30	22	2.52	20.0	106	1.60	1.50	88
SRU8028-330Y	33.0	±30	20	2.52	15.0	147	1.30	1.10	74
SRU8028-470Y	47.0	±30	14	2.52	12.0	177	1.20	1.00	62
SRU8028-680Y	68.0	±30	23	2.52	9.0	317	0.85	0.80	50
SRU8028-101Y	100.0	±30	35	0.796	8.0	390	0.75	0.70	41

\*\*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



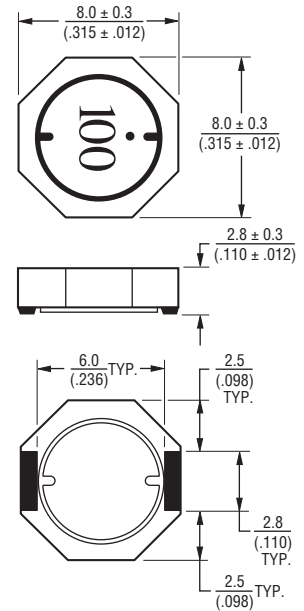
### General Specifications

Test Voltage ..... 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>  
 Temperature Rise ..... 40 °C max. at rated I<sub>rms</sub>  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM)..... N/A

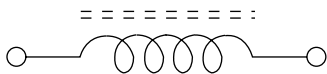
### Materials

Core.....Ferrite DR and RI core  
 Wire .....Enameled copper  
 Terminal.....Ag/Ni/Sn  
 Packaging..... 1500 pcs. per reel

### Product Dimensions

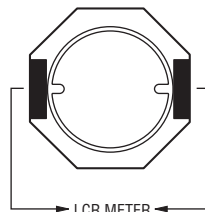


### Electrical Schematic

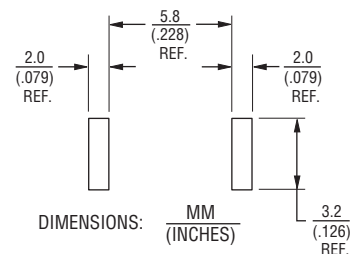


\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.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

### Inductor Connection



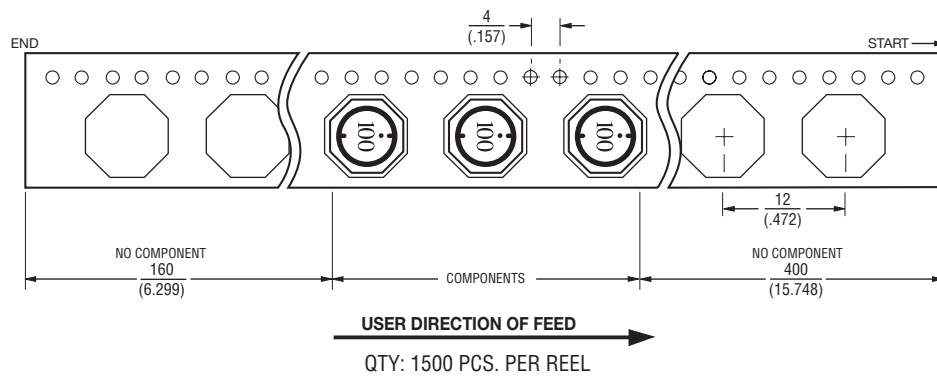
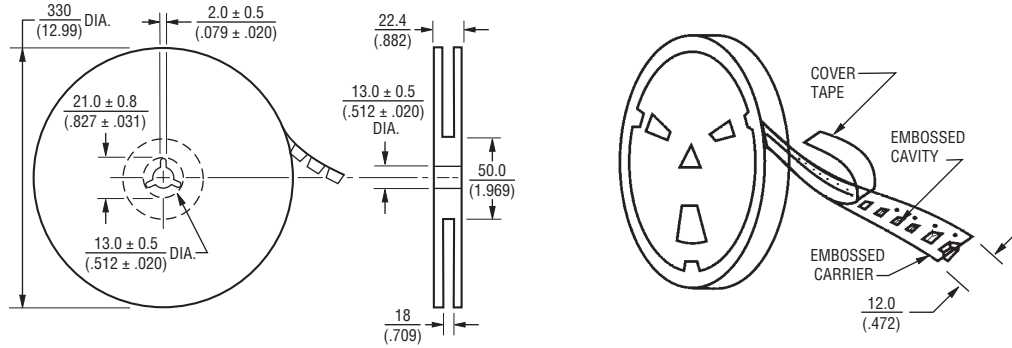
### Recommended Layout



# SRU8028 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



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

REV. 03/18

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[CR32NP-8R2MC](#) [CR43NP-390KC](#) [CR43NP-560KC](#) [CR43NP-680KC](#) [CR54NP-181KC](#) [CR54NP-470LC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#)  
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