



**THE DATASHEET OF  
SRU5028-101Y**





## Features

- Available in E6 series
- Unit height of 2.8 mm
- Current up to 3.5 A
- RoHS compliant\*

## Applications

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

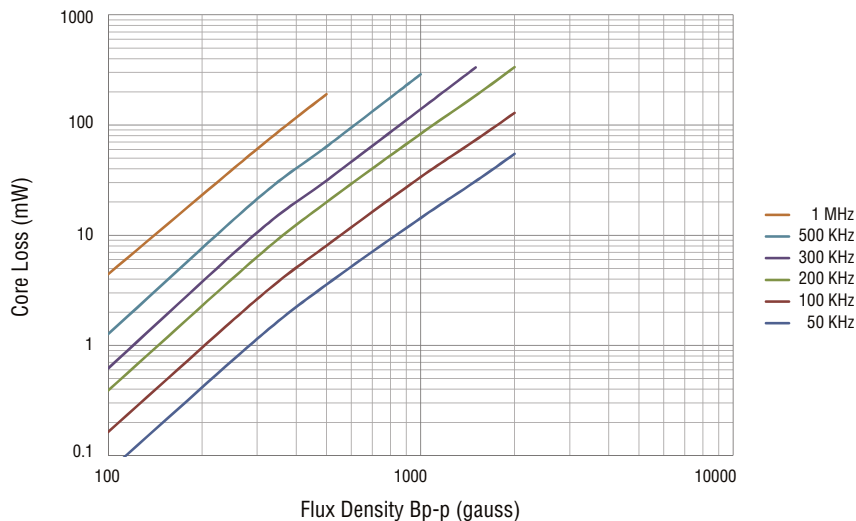
# SRU5028 Series - Shielded SMD Power Inductors

## Electrical Specifications

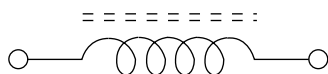
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU5028-1R2Y	1.2	±30	10	7.96	200	16.8	3.50	3.40	453
SRU5028-2R2Y	2.2	±30	10	7.96	130	21.0	3.20	2.50	313
SRU5028-3R3Y	3.3	±30	10	7.96	90	24.0	2.80	2.10	272
SRU5028-4R7Y	4.7	±30	9	7.96	50	32.0	2.20	1.85	214
SRU5028-6R8Y	6.8	±30	10	7.96	55	42.0	2.00	1.55	177
SRU5028-100Y	10.0	±30	18	2.52	25	63.0	1.80	1.40	151
SRU5028-150Y	15.0	±30	18	2.52	23	108.0	1.10	1.00	123
SRU5028-220Y	22.0	±30	15	2.52	18	162.0	0.95	0.85	95
SRU5028-330Y	33.0	±30	15	2.52	16	203.0	0.80	0.68	87
SRU5028-470Y	47.0	±30	13	2.52	13	285.0	0.70	0.62	69
SRU5028-680Y	68.0	±30	13	2.52	10	450.0	0.56	0.46	59
SRU5028-101Y	100.0	±30	15	0.796	8	625.0	0.47	0.42	50

\*\*K-Factor: To calculate core flux density, Bp-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

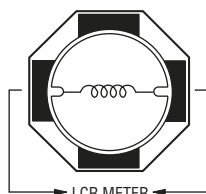


## Electrical Schematic



\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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## Inductor Connection



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

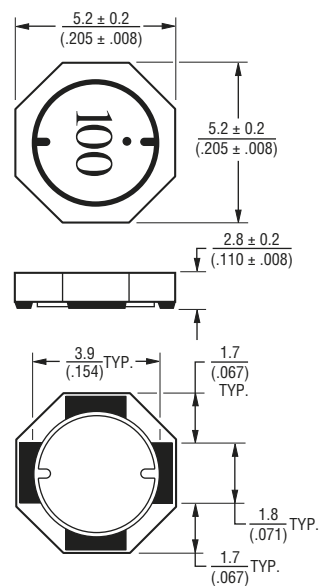
## General Specifications

Test Voltage ..... 0.1 V  
 Reflow Soldering .. 230 °C, 50 sec. max.  
 Operating Temp. .... -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temp. .... -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 260 °C for 10 sec.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

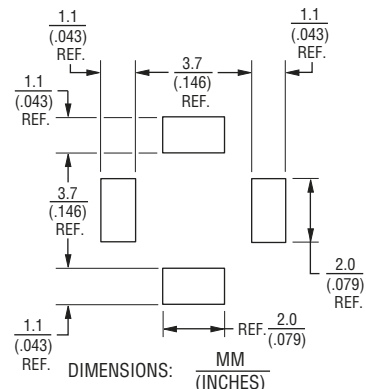
## Materials

Core ..... Ferrite DR and RI core  
 Wire ..... Enameled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current..Ind. drop 35 % typ. at Isat  
 Temp. Rise..... 40 °C max. at rated Irms  
 Packaging..... 600 pcs. per reel

## Product Dimensions



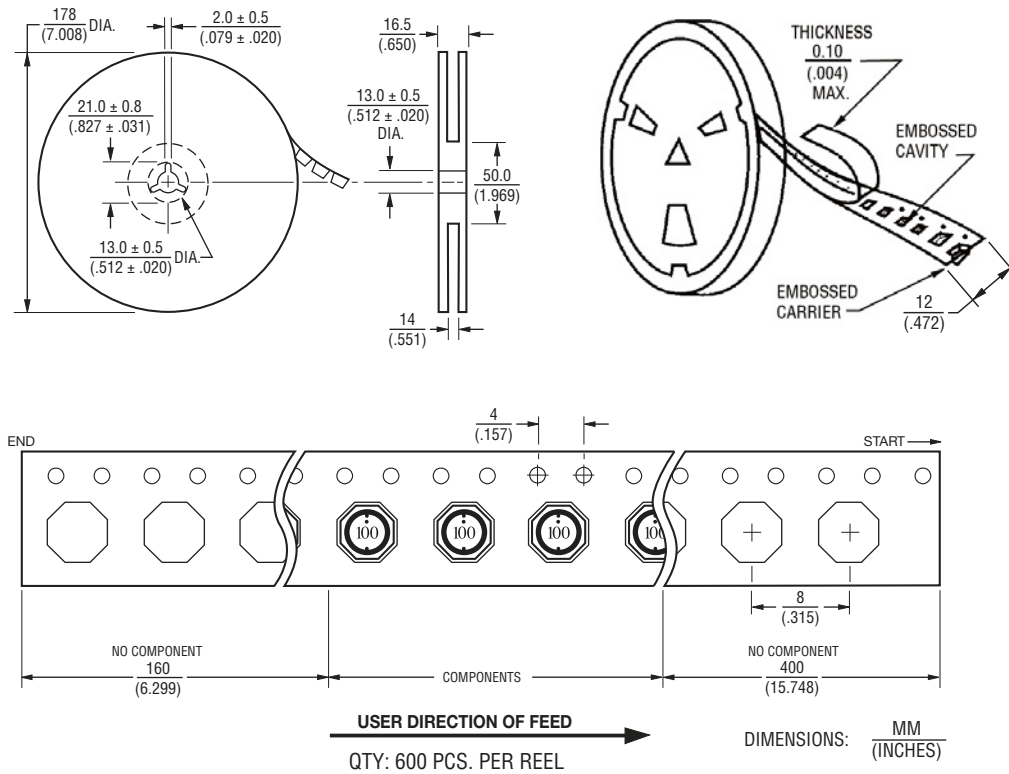
## Recommended Layout



# SRU5028 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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