



**THE DATASHEET OF  
SRU6025-221Y**





## 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

## SRU6025 Series - Shielded SMD Power Inductors

### Electrical Specifications

Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU6025-1R2Y	1.2	±30	8	7.96	120	19	4.00	3.20	535
SRU6025-2R2Y	2.2	±30	8	7.96	65	24	3.40	2.35	370
SRU6025-3R3Y	3.3	±30	8	7.96	50	27	3.20	2.00	321
SRU6025-4R7Y	4.7	±30	8	7.96	42	35	2.70	1.55	253
SRU6025-6R8Y	6.8	±30	8	7.96	36	42	2.40	1.30	229
SRU6025-8R2Y	8.2	±30	8	7.96	30	52	2.20	1.25	193
SRU6025-100Y	10	±30	8	7.96	25	57	2.00	1.05	178
SRU6025-150Y	15	±30	12	2.52	22	86	1.80	0.92	146
SRU6025-220Y	22	±30	12	2.52	18	130	1.60	0.70	123
SRU6025-330Y	33	±30	12	2.52	12	180	1.20	0.64	98
SRU6025-470Y	47	±30	12	2.52	10	250	1.00	0.48	84
SRU6025-680Y	68	±30	10	2.52	8	365	0.80	0.40	68
SRU6025-101Y	100	±30	24	2.52	7	500	0.70	0.35	55
SRU6025-151Y	150	±30	30	2.52	5	770	0.54	0.28	47
SRU6025-221Y	220	±30	20	2.52	4	1250	0.42	0.24	39

\*\*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 on page 2.

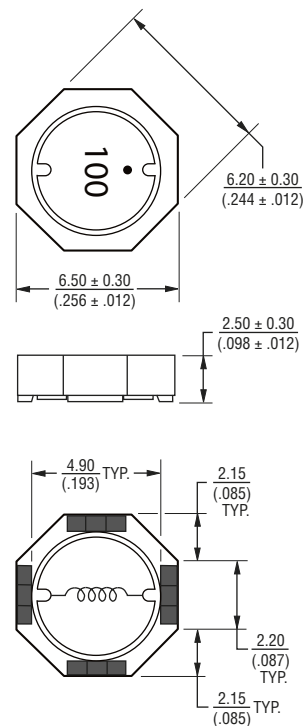
### General Specifications

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

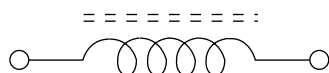
Core ..... Ferrite DR and RI core  
 Wire ..... Enameled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current.. Ind. drop 35 % typ. at Isat  
 Temp. Rise..... 30 °C max. at rated Irms  
 Packaging..... 600 pcs. per reel

### Product Dimensions

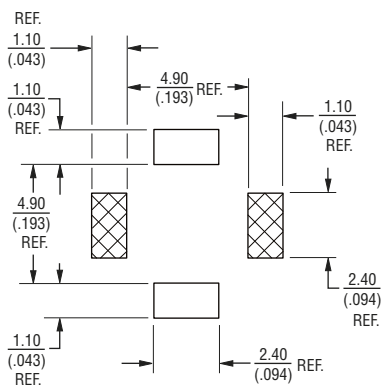


DIMENSIONS:  $\frac{MM}{(INCHES)}$

### Electrical Schematic



### Recommended Layout



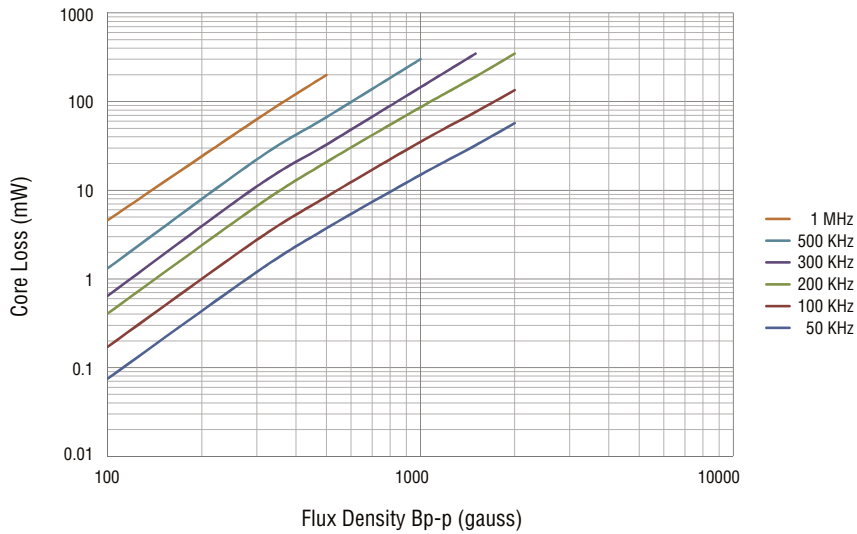
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

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

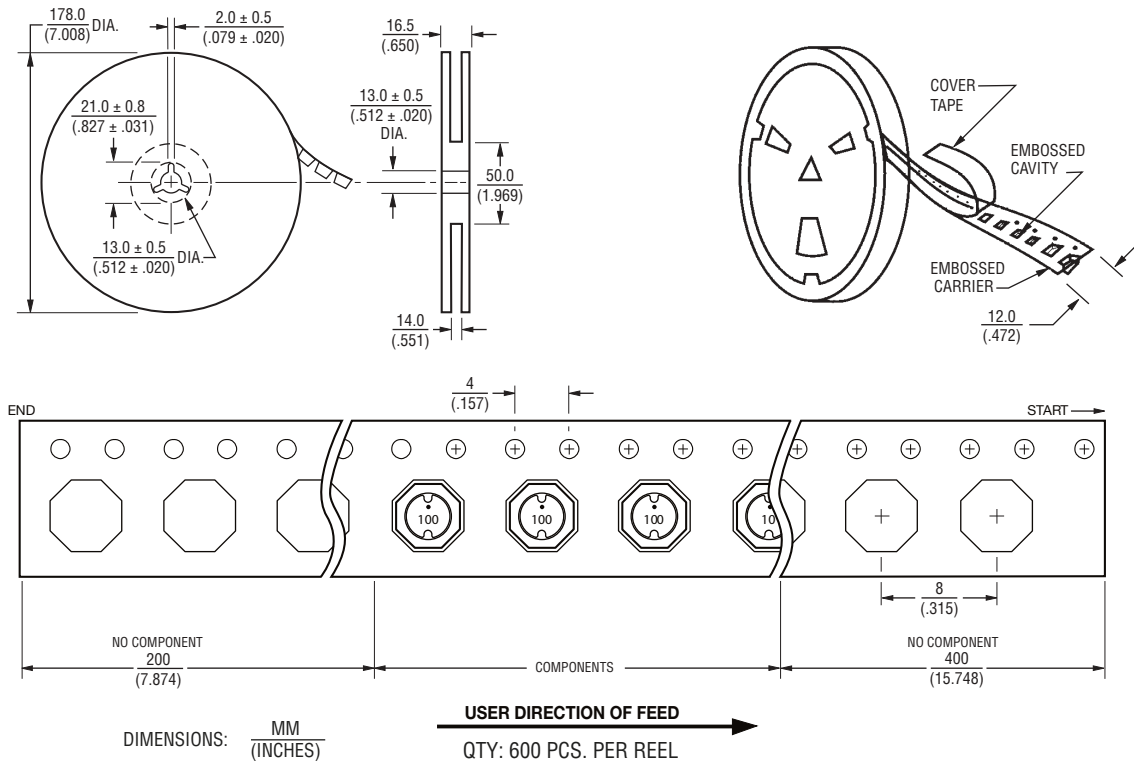
# SRU6025 Series - Shielded SMD Power Inductors



## Core Loss vs. Flux Density



## 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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