



**THE DATASHEET OF  
SRU6025-330Y**





## 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.

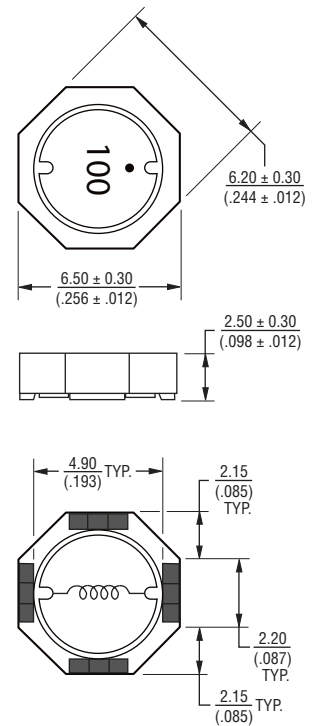
## General Specifications

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

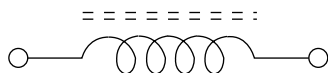
Core ..... Ferrite DR and RI core  
 Wire ..... Enameled copper  
 Terminal ..... Ag/Ni/Sn  
 Rated Current.. Ind. drop 35 % typ. at Isat  
 Temp. Rise..... 30 °C max. at rated Irms  
 Packaging..... 600 pcs. per reel

## Product Dimensions

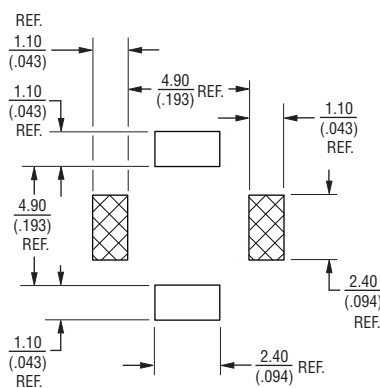


DIMENSIONS:  $\frac{MM}{(INCHES)}$

## Electrical Schematic



## Recommended Layout



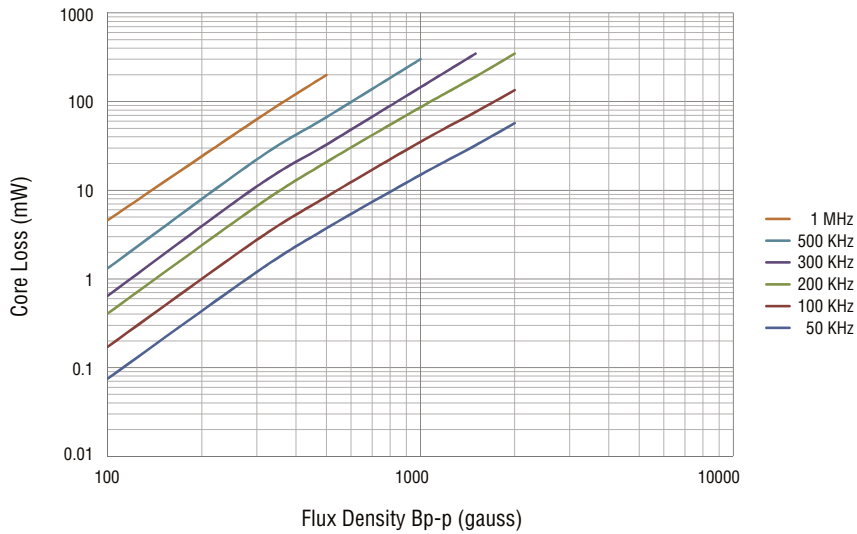
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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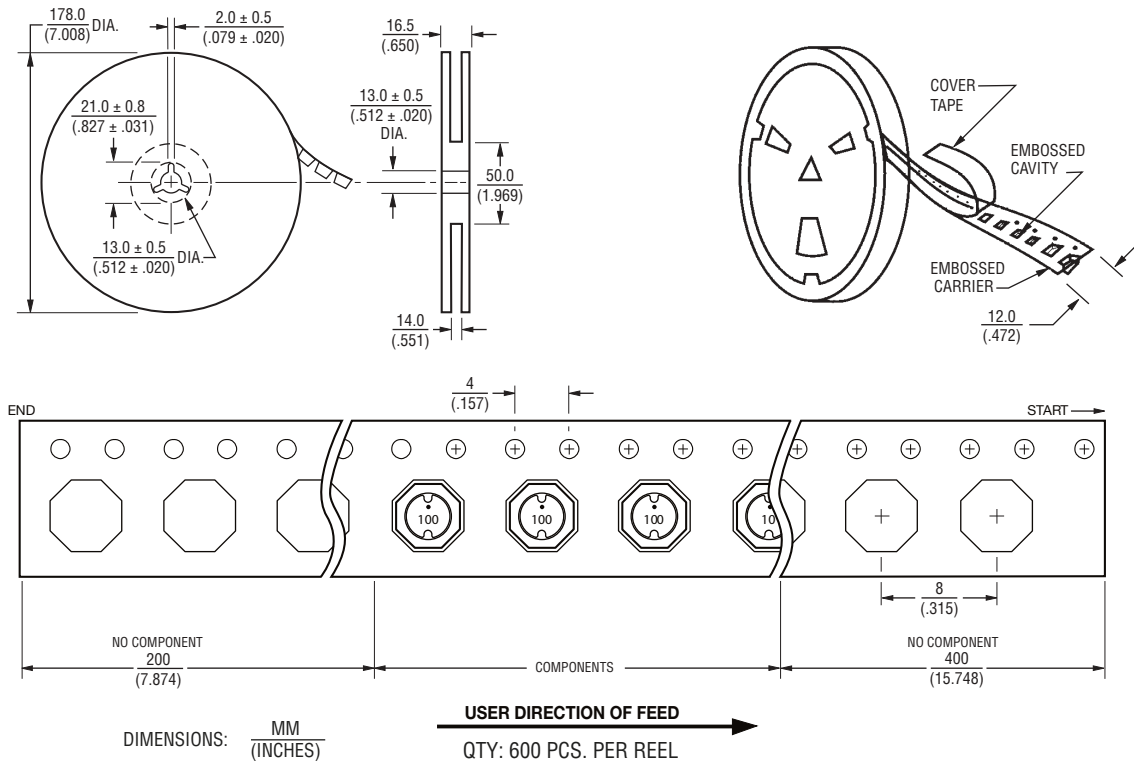
# SRU6025 Series - Shielded SMD Power Inductors



## 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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