



**THE DATASHEET OF
SRU5028-470Y**





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

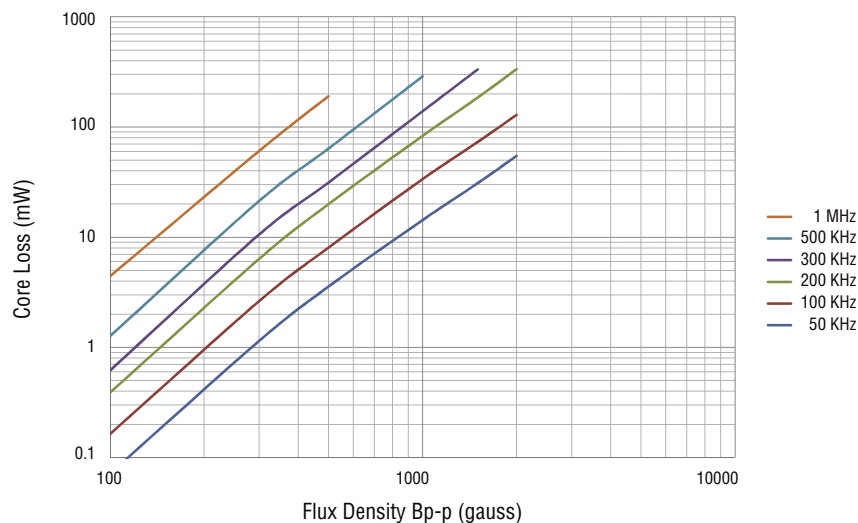
SRU5028 Series - Shielded SMD Power Inductors

Electrical Specifications

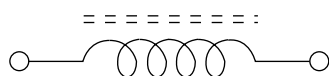
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Min. (MHz)	RDC (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	L (μH)	Tol. (%)							
SRU5028-1R2Y	1.2	±30	10	7.96	200	16.8	3.50	3.40	453
SRU5028-2R2Y	2.2	±30	10	7.96	130	21.0	3.20	2.50	313
SRU5028-3R3Y	3.3	±30	10	7.96	90	24.0	2.80	2.10	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

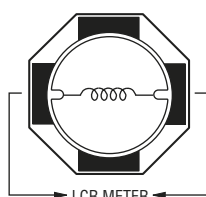


Electrical Schematic



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

Inductor Connection



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

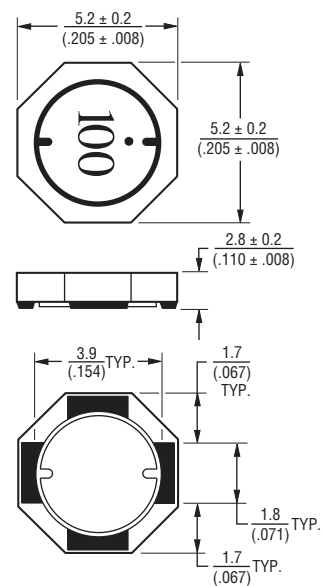
General Specifications

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

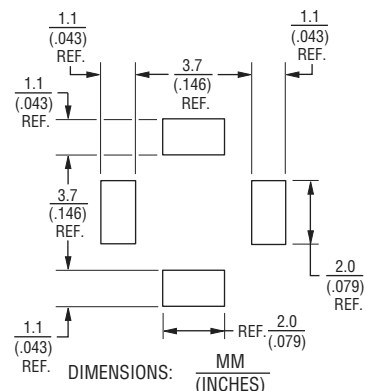
Materials

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



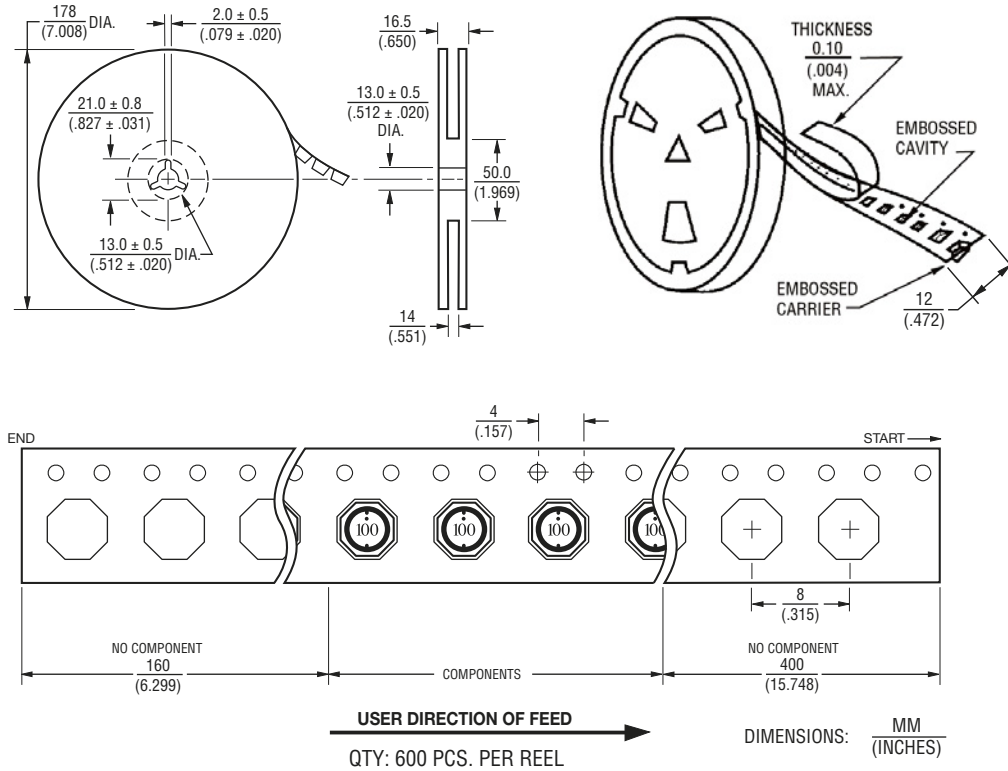
Recommended Layout



SRU5028 Series - Shielded SMD Power Inductors

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Packaging Specifications



REV. 03/18

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