



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
 - Car radios

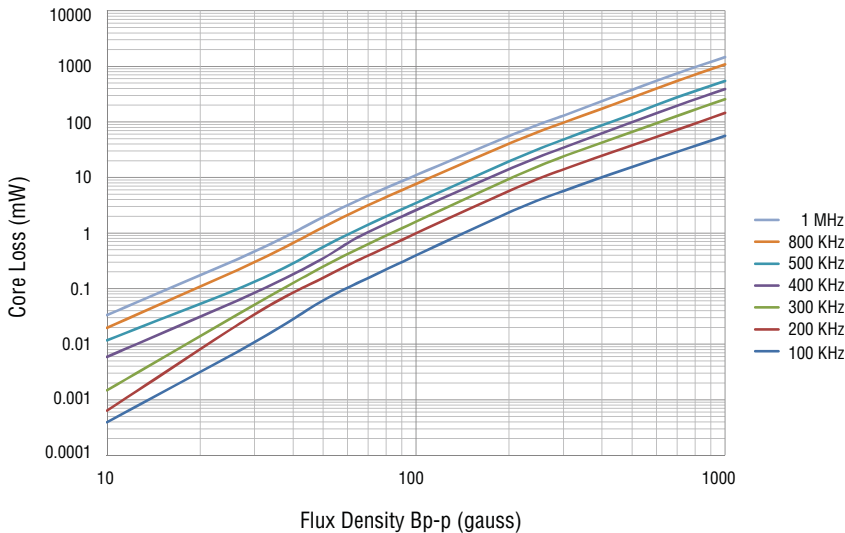
SRU8028 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC (mΩ)	I _{rms} Max. (A)	I _{sat} 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



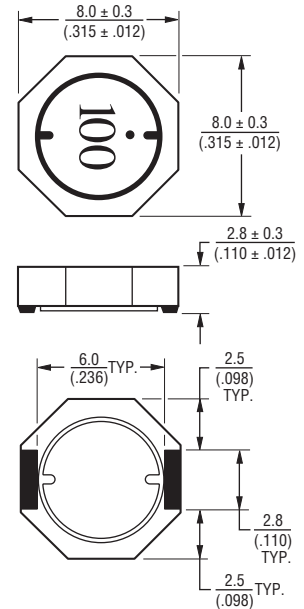
General Specifications

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_{sat}
 Temperature Rise 40 °C max. at rated I_{rms}

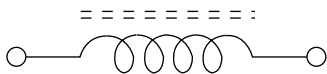
Materials

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

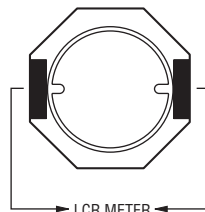
Product Dimensions



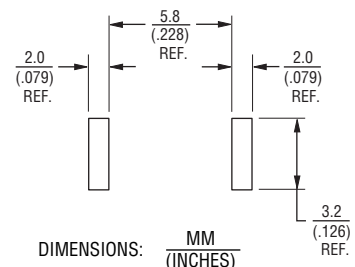
Electrical Schematic



Inductor Connection



Recommended Layout

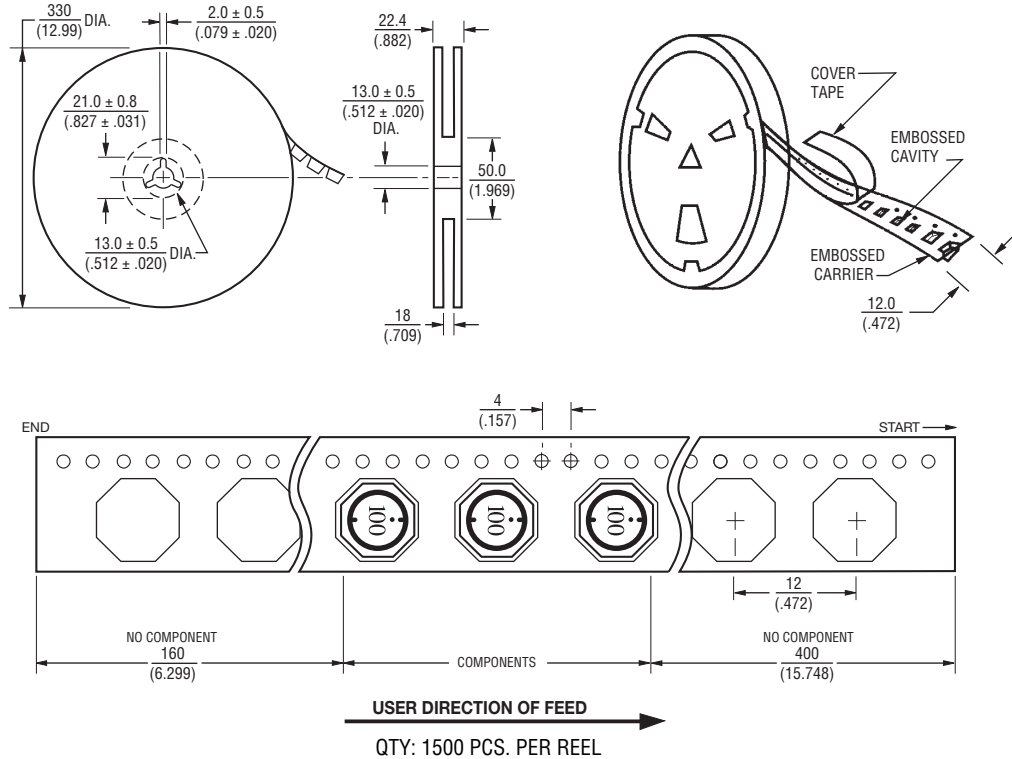


* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.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

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BOURNS®

Packaging Specifications



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

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