



**THE DATASHEET OF
SRU2009-1R0Y**





Features

- Maximum height of 1.0 mm
- Current up to 1.45 A
- RoHS compliant*

Applications

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

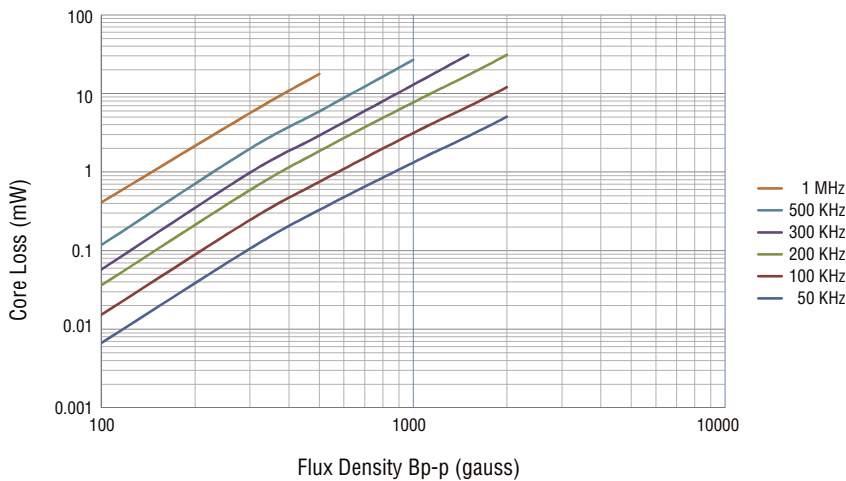
SRU2009 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	Irms Max. (A)	Isat Typ. (A)	Marking	**K-Factor
	(μH)	Tol. %								
SRU2009-1R0Y	1.0	±30	7	7.96	200	110	1.45	1.30	A	2653
SRU2009-2R2Y	2.2	±30	7	7.96	120	210	1.10	0.80	C	1730
SRU2009-3R3Y	3.3	±30	7	7.96	100	320	0.80	0.60	E	1474
SRU2009-4R4Y	4.4	±30	7	7.96	85	430	0.68	0.50	F	1206
SRU2009-6R8Y	6.8	±30	7	7.96	70	650	0.52	0.45	G	1020
SRU2009-100Y	10	±30	10	2.52	50	1080	0.40	0.35	H	847
SRU2009-150Y	15	±30	10	2.52	40	1370	0.30	0.30	I	698
SRU2009-220Y	22	±30	10	2.52	30	2600	0.22	0.22	J	577

**K-Factor: To calculate core flux density, Bp-p (gauss) = $K \times L(\mu\text{H}) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density



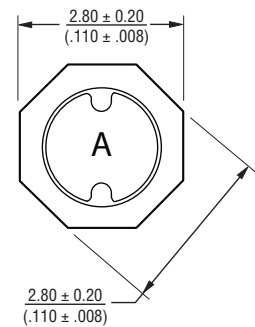
General Specifications

Test Voltage 0.1 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.
 Moisture Sensitivity Level 1
 ESD Classification (HBM) N/A

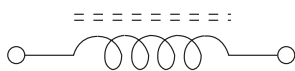
Materials

Core Ferrite DR and RI core
 Wire Enameled copper
 Terminal Ag/Ni/Sn
 Rated Current Ind. drop 35 % typ. at Isat
 Temperature Rise 40 °C max. at rated Irms
 Packaging 1,500 pcs. per reel

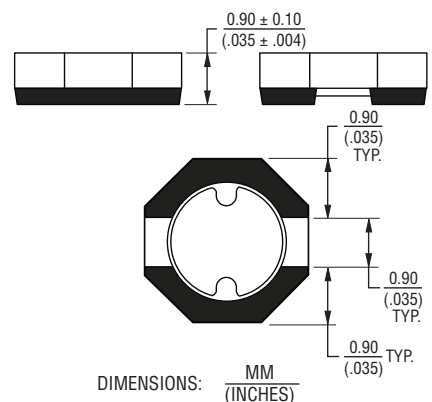
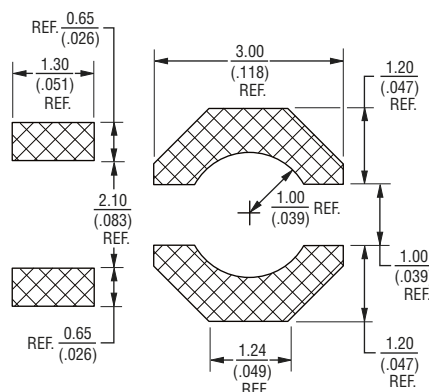
Product Dimensions



Electrical Schematic



Recommended Layout



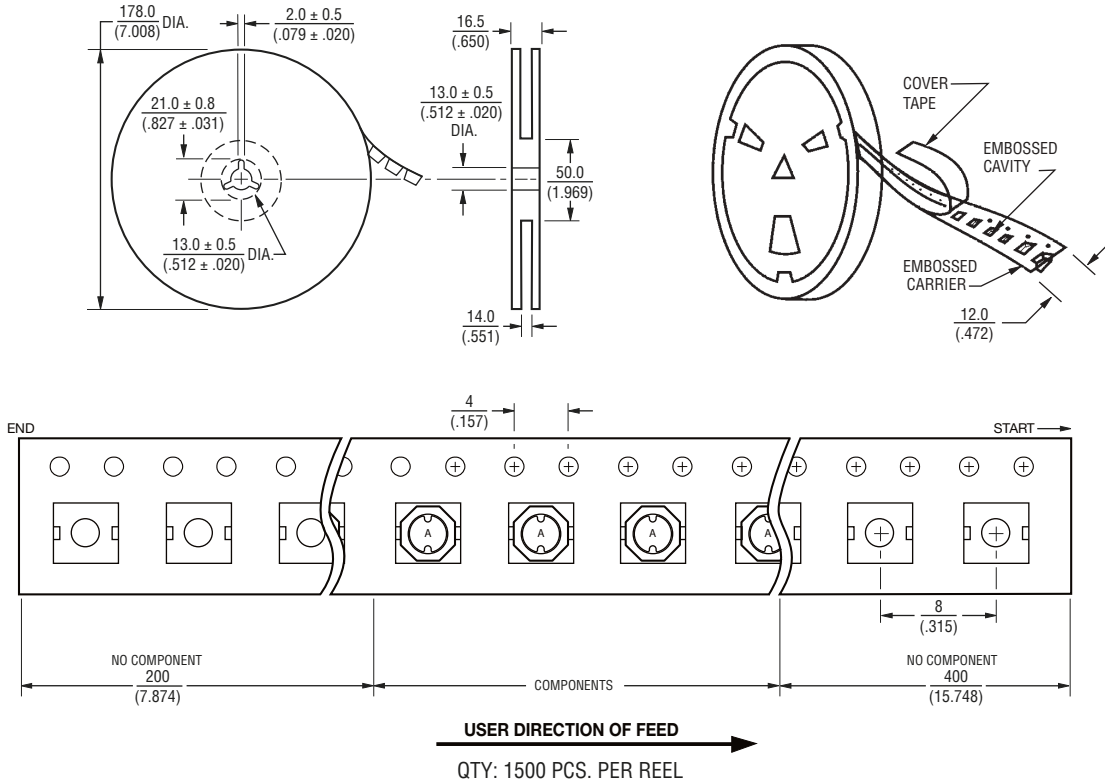
WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

*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.

SRU2009 Series - Shielded SMD Power Inductors

BOURNS®

Packaging Specifications



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

REV. 03/18

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