



## Features

- Available in E6 series
- Unit height of 3.8 mm
- Current up to 7.2 A
- Lead free
- RoHS compliant\*

## Applications

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

# SRU1038 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part No.	Inductance 100 KHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (mΩ)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SRU1038-1R5Y	1.5	± 30	14	7.96	65.0	5.2	7.20	7.00
SRU1038-2R2Y	2.2	± 30	12	7.96	55.0	7.7	6.80	6.50
SRU1038-2R5Y	2.5	± 30	12	7.96	50.0	12.5	6.10	6.00
SRU1038-3R5Y	3.5	± 30	14	7.96	35.0	11.5	5.50	5.50
SRU1038-3R8Y	3.8	± 30	14	7.96	35.0	15.0	5.50	5.50
SRU1038-5R0Y	5.0	± 30	12	7.96	30.0	14.5	4.60	4.80
SRU1038-5R2Y	5.2	± 30	12	7.96	30.0	22.0	4.60	4.80
SRU1038-6R2Y	6.2	± 30	12	7.96	25.0	16.5	4.00	4.20
SRU1038-7R0Y	7.0	± 30	13	7.96	36.0	35.0	3.90	4.00
SRU1038-100Y	10.0	± 30	24	7.96	20.0	25.0	3.80	3.60
SRU1038-150Y	15.0	± 30	24	2.52	16.0	37.0	2.80	2.70
SRU1038-220Y	22.0	± 30	20	2.52	12.0	55.8	2.20	2.30
SRU1038-270Y	27.0	± 30	22	2.52	11.0	78.0	1.85	1.90
SRU1038-330Y	33.0	± 30	22	2.52	10.0	86.0	1.80	1.80
SRU1038-470Y	47.0	± 30	22	2.52	8.0	121.0	1.65	1.60
SRU1038-680Y	68.0	± 30	24	2.52	7.0	166.0	1.10	1.30
SRU1038-101Y	100.0	± 30	24	0.796	6.0	220.0	1.30	1.10
SRU1038-151Y	150.0	± 30	20	0.796	5.0	358.0	0.90	0.80
SRU1038-221Y	220.0	± 30	22	0.796	4.0	565.0	0.65	0.65
SRU1038-331Y	330.0	± 30	20	0.796	3.0	773.0	0.55	0.52

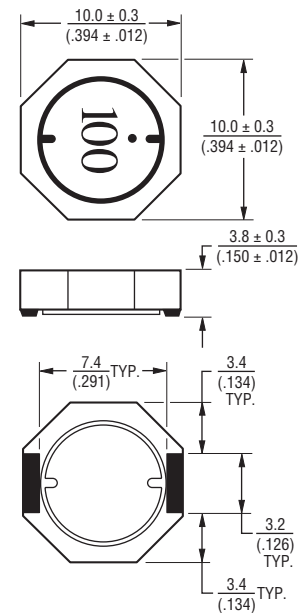
## General Specifications

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.

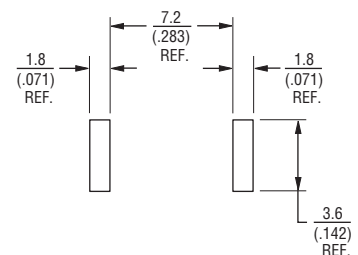
## Materials

Core.....Ferrite DR and RI core  
 Wire.....Enameled copper  
 Base.....LCP E4008  
 Terminal.....Ag/Ni/Sn  
 Rated Current  
 .....Ind. drop 35 % typ. at Isat  
 Temperature Rise  
 .....40 °C max. at rated I<sub>rms</sub>  
 Packaging.....800 pcs. per reel

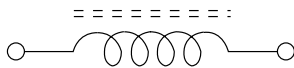
## Product Dimensions



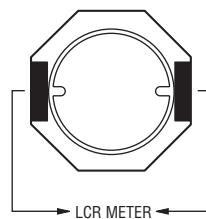
## Recommended Layout



## Electrical Schematic



## Inductor Connection



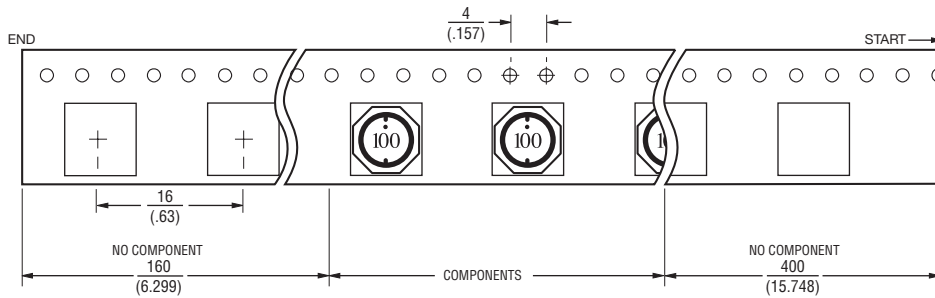
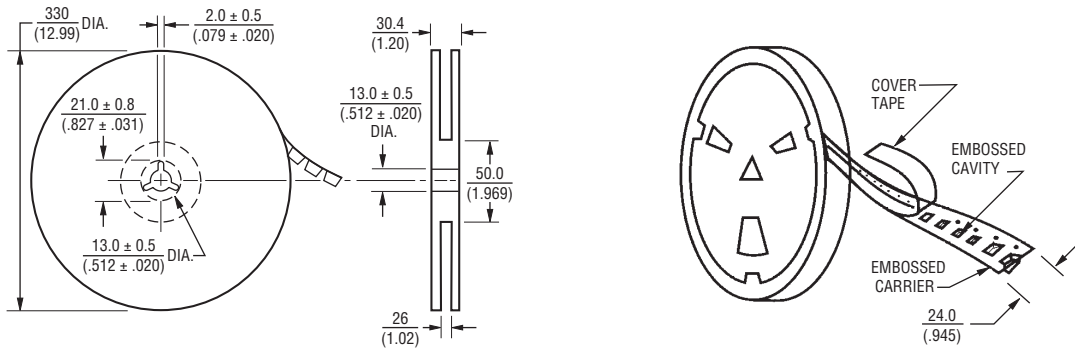
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# SRU1038 Series - Shielded SMD Power Inductors

**BOURNS®**

## Packaging Specifications



**USER DIRECTION OF FEED** →

QTY: 800 PCS. PER REEL

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

REV. 08/09

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Customers should verify actual device performance in their specific applications.