



### Features

- Available in E6 series
- Low profile of 3 mm
- High current
- Lead free
- RoHS compliant\*

### Applications

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

## SRR1003 Series - Shielded Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1kHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC (Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SRR1003-1R8M	1.8	± 20	10	7.96M	100.0	0.03	3.00	8.00
SRR1003-2R2M	2.2	± 20	11	7.96M	90.0	0.045	2.76	6.70
SRR1003-3R0M	3.0	± 20	11	7.96M	70.0	0.062	2.20	5.60
SRR1003-3R9M	3.9	± 20	10	7.96M	60.0	0.07	2.10	5.20
SRR1003-4R7M	4.7	± 20	10	7.96M	50.0	0.08	1.90	4.60
SRR1003-7R5M	7.5	± 20	10	7.96M	32.0	0.10	1.44	3.90
SRR1003-100M	10	± 20	18	2.52M	28.0	0.15	1.24	3.30
SRR1003-120M	12	± 20	20	2.52M	26.0	0.19	1.10	3.00
SRR1003-150M	15	± 20	20	2.52M	25.0	0.20	1.02	2.60
SRR1003-180M	18	± 20	20	2.52M	14.0	0.27	0.90	2.50
SRR1003-220M	22	± 20	17	2.52M	22.0	0.30	0.85	2.10
SRR1003-270M	27	± 20	17	2.52M	19.0	0.40	0.75	1.90
SRR1003-330M	33	± 20	17	2.52M	17.0	0.45	0.70	1.70
SRR1003-390M	39	± 20	18	2.52M	16.0	0.56	0.65	1.60
SRR1003-470M	47	± 20	18	2.52M	14.0	0.65	0.60	1.40
SRR1003-560M	56	± 20	15	2.52M	13.0	0.68	0.52	1.30
SRR1003-680M	68	± 20	15	2.52M	11.0	0.80	0.48	1.20
SRR1003-820M	82	± 20	20	2.52M	11.0	1.20	0.42	1.00
SRR1003-101M	100	± 20	23	0.796M	10.0	1.40	0.40	0.95
SRR1003-121M	120	± 20	22	0.796M	9.0	1.52	0.35	0.85
SRR1003-151M	150	± 20	23	0.796M	8.0	1.80	0.32	0.80
SRR1003-181M	180	± 20	20	0.796M	7.0	2.20	0.28	0.75
SRR1003-221M	220	± 20	20	0.796M	6.0	2.20	0.26	0.65
SRR1003-271Y	270	± 15	26	0.796M	4.1	3.10	0.22	0.60
SRR1003-331Y	330	± 15	26	0.796M	3.6	3.60	0.20	0.55
SRR1003-391Y	390	± 15	28	0.796M	2.6	4.60	0.18	0.46
SRR1003-471Y	470	± 15	28	0.796M	2.1	5.10	0.16	0.45

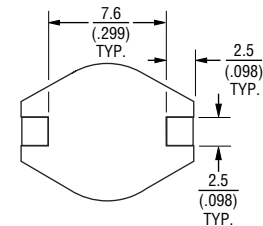
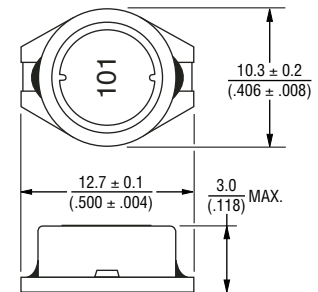
### General Specifications

Test Voltage ..... 1 V  
 Reflow soldering ..... 250 °C; 10 sec max.  
 (In compliance with JEDEC, J-STD-020C, Table 4-2)  
 Operating Temperature -40 °C to +125 °C  
 (Temperature rise included)  
 Storage Temperature -40 °C to +125 °C  
 Resistance to Soldering Heat  
 ..... 250 °C, 10 sec. max.

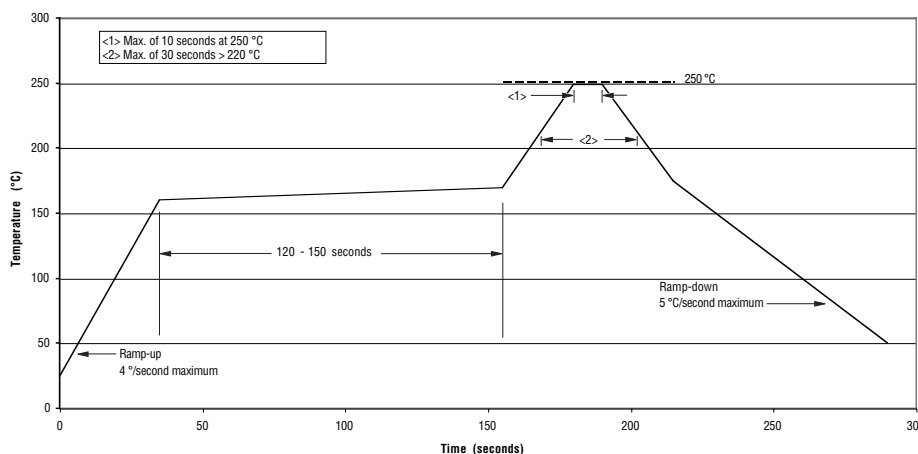
### Materials

Core ..... Ferrite DR and RI core  
 Wire ..... Enameled copper  
 Base ..... LCP E4008  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Ind. drop 10 % typ. at Isat  
 Temperature Rise  
 ..... 40 °C max. at rated Irms  
 Packaging ..... 1000 pcs. per reel

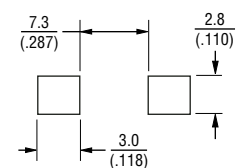
### Product Dimensions



### Soldering Profile



### Recommended Layout



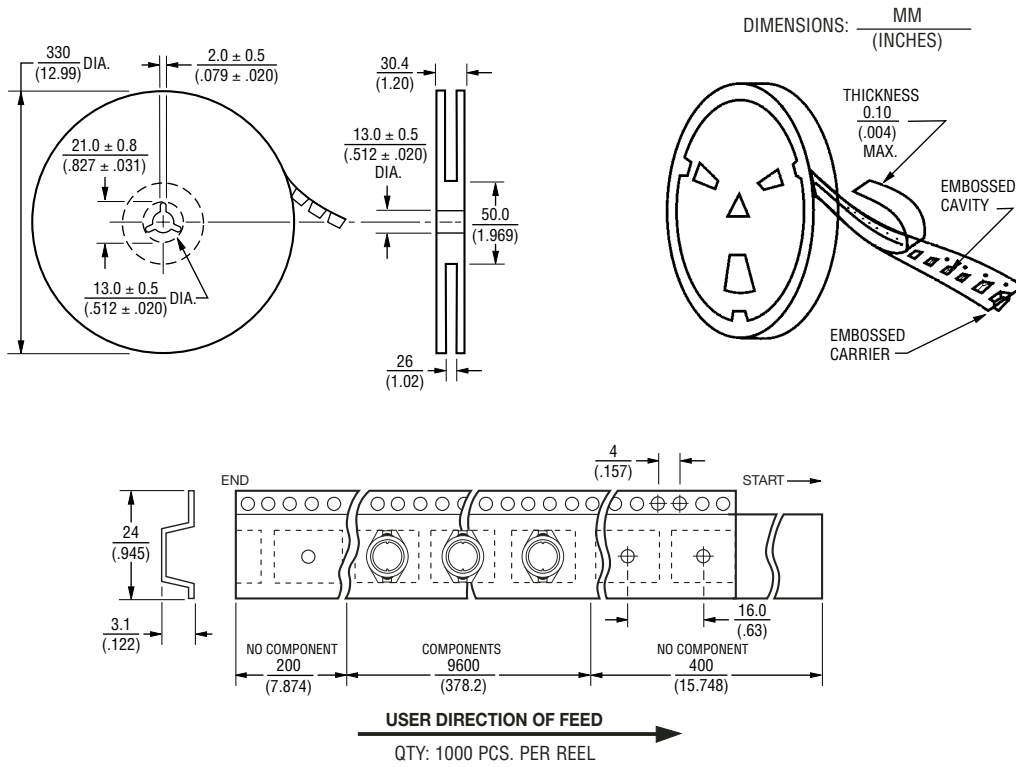
DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

\*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.

# SRR1003 Series - Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



REV. 02/06

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