



**THE DATASHEET OF  
SRR0804-121K**





### Features

- Available in E12 series
- Low profile - 3.8 mm unit height
- High current
- RoHS compliant\*

### Applications

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

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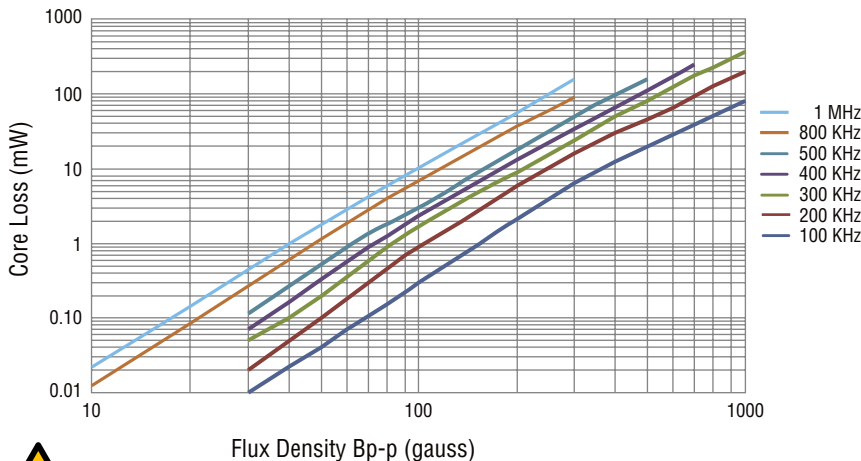
## SRR0804 Series - Shielded Power Inductors

### Electrical Specifications

Bourns Part No.	Inductance 1 KHz		Q Ref.	Test Frequency (MHz)	SRF Min. (MHz)	RDC Max. (Ω)	I rms Max. (A)	I sat Typ. (A)	**K- Factor
	μH	Tol. %							
SRR0804-5R0M	5.0	± 20	20	7.96M	45.0	0.08	1.70	2.80	141
SRR0804-7R5M	7.5	± 20	20	7.96M	40.0	0.10	1.40	2.60	120
SRR0804-100M	10	± 20	38	2.52M	32.0	0.12	1.20	2.20	105
SRR0804-120M	12	± 20	38	2.52M	28.0	0.15	1.10	1.90	93
SRR0804-150M	15	± 20	38	2.52M	25.0	0.17	1.00	1.60	83
SRR0804-180Y	18	± 15	35	2.52M	23.0	0.19	0.90	1.50	76
SRR0804-220Y	22	± 15	30	2.52M	22.0	0.25	0.80	1.30	69
SRR0804-270Y	27	± 15	28	2.52M	18.0	0.27	0.70	1.30	61
SRR0804-330Y	33	± 15	26	2.52M	17.0	0.30	0.65	1.10	55
SRR0804-390Y	39	± 15	26	2.52M	16.0	0.38	0.60	1.00	52
SRR0804-470K	47	± 10	24	2.52M	14.0	0.46	0.55	0.95	47
SRR0804-560K	56	± 10	24	2.52M	12.0	0.60	0.50	0.85	43
SRR0804-680K	68	± 10	22	2.52M	11.0	0.70	0.45	0.80	39
SRR0804-820K	82	± 10	20	2.52M	10.0	0.80	0.40	0.73	36
SRR0804-101K	100	± 10	50	0.796M	9.0	0.95	0.37	0.65	33
SRR0804-121K	120	± 10	50	0.796M	8.5	1.00	0.35	0.55	30
SRR0804-151K	150	± 10	53	0.796M	7.0	1.30	0.30	0.50	27
SRR0804-181K	180	± 10	53	0.796M	6.0	1.45	0.28	0.45	24
SRR0804-221K	220	± 10	55	0.796M	5.5	1.90	0.24	0.40	22
SRR0804-271K	270	± 10	50	0.796M	5.5	2.15	0.22	0.35	20
SRR0804-331K	330	± 10	60	0.796M	5.0	2.80	0.19	0.32	18
SRR0804-391K	390	± 10	55	0.796M	4.5	3.30	0.17	0.30	16
SRR0804-471K	470	± 10	60	0.796M	4.0	3.60	0.16	0.28	15

\*\*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



**WARNING Cancer and Reproductive Harm - [www.P65Warnings.ca.gov](http://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](http://www.bourns.com/docs/legal/disclaimer.pdf)

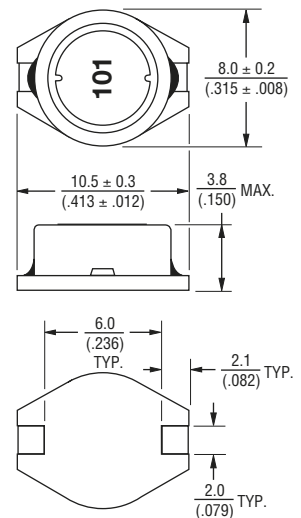
### General Specifications

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

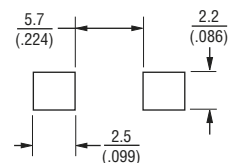
### Materials

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

### Product Dimensions



### Recommended Layout

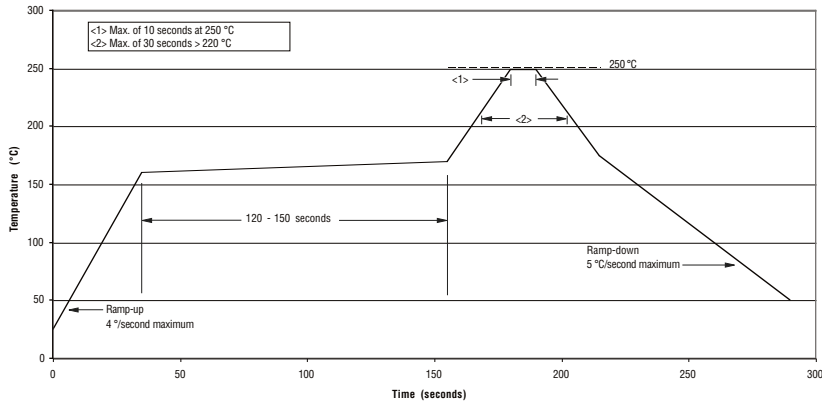


DIMENSIONS:  $\frac{\text{MM}}{\text{(INCHES)}}$

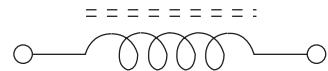
# SRR0804 Series - Shielded Power Inductors

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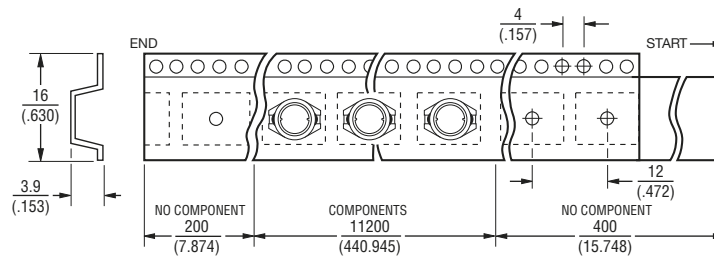
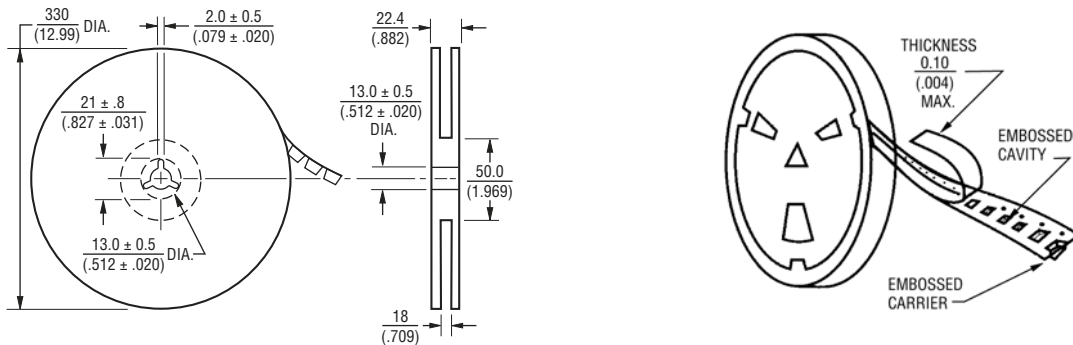
## Soldering Profile



## Schematic



## Packaging Specifications



USER DIRECTION OF FEED →  
QTY: 1000 PCS. PER REEL

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

REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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