



## Features

- Available in E12 values
- Inductance range as low as 1.0  $\mu\text{H}$
- Current rating to 9.4 amps
- RoHS compliant\*

## Applications

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

# SRR1260 Series - Shielded SMD Power Inductors

## Electrical Specifications

Bourns Part Number	Inductance		Q (Typ.)	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (m $\Omega$ )	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	( $\mu\text{H}$ )	Tol. (%)							
SRR1260-1R0Y	1.0	$\pm 30$	26	7.96	100.00	7.8	9.40	10.00	158
SRR1260-1R2Y	1.2	$\pm 30$	18	7.96	91.10	8.0	9.20	9.80	123
SRR1260-1R5Y	1.5	$\pm 30$	24	7.96	86.00	9.5	8.80	9.90	123
SRR1260-2R2Y	2.2	$\pm 30$	22	7.96	70.00	10.5	8.20	8.50	100
SRR1260-2R4Y	2.4	$\pm 30$	18	7.96	63.80	11.5	7.80	8.00	100
SRR1260-3R3Y	3.3	$\pm 30$	20	7.96	40.00	12.0	7.60	7.80	74
SRR1260-3R5Y	3.5	$\pm 30$	22	7.96	37.60	13.0	7.50	7.60	74
SRR1260-4R7Y	4.7	$\pm 30$	19	7.96	36.70	15.5	6.80	7.00	65
SRR1260-5R6Y	5.6	$\pm 30$	19	7.96	33.00	16.2	6.70	6.90	58
SRR1260-6R1Y	6.1	$\pm 30$	21	7.96	29.80	17.0	6.60	6.80	58
SRR1260-6R8Y	6.8	$\pm 30$	20	7.96	28.20	18.0	6.30	6.50	53
SRR1260-7R6Y	7.6	$\pm 30$	16	7.96	27.90	19.0	6.00	6.20	53
SRR1260-8R2Y	8.2	$\pm 30$	18	7.96	24.00	19.5	5.70	5.80	48
SRR1260-100M	10.0	$\pm 20$	32	2.52	21.00	20.0	5.50	5.50	44
SRR1260-120M	12.0	$\pm 20$	27	2.52	19.40	23.0	5.20	5.00	41
SRR1260-150M	15.0	$\pm 20$	25	2.52	17.60	27.0	5.00	4.60	36
SRR1260-180M	18.0	$\pm 20$	28	2.52	15.50	36.0	4.20	3.90	32
SRR1260-220M	22.0	$\pm 20$	29	2.52	13.40	43.0	4.00	3.70	30
SRR1260-270M	27.0	$\pm 20$	26	2.52	12.70	45.0	3.60	3.30	28
SRR1260-330M	33.0	$\pm 20$	27	2.52	9.97	60.0	3.00	2.80	24
SRR1260-390M	39.0	$\pm 20$	22	2.52	10.40	70.0	2.80	2.70	22
SRR1260-470M	47.0	$\pm 20$	22	2.52	7.63	86.0	2.60	2.50	20
SRR1260-560M	56.0	$\pm 20$	24	2.52	7.92	100.0	2.30	2.20	18
SRR1260-680M	68.0	$\pm 20$	22	2.52	7.43	110.0	2.10	2.10	17
SRR1260-820M	82.0	$\pm 20$	25	2.52	6.85	145.0	1.95	1.90	15
SRR1260-101M	100.0	$\pm 20$	26	0.796	6.07	180.0	1.70	1.70	14
SRR1260-121K	120.0	$\pm 10$	26	0.796	5.50	210.0	1.65	1.65	13
SRR1260-151K	150.0	$\pm 10$	20	0.796	5.00	260.0	1.55	1.55	11
SRR1260-181K	180.0	$\pm 10$	26	0.796	4.50	320.0	1.40	1.40	10
SRR1260-221K	220.0	$\pm 10$	22	0.796	4.20	380.0	1.38	1.30	9
SRR1260-271K	270.0	$\pm 10$	20	0.796	3.60	450.0	1.30	1.20	8
SRR1260-331K	330.0	$\pm 10$	22	0.796	3.20	580.0	1.15	1.10	8
SRR1260-391K	390.0	$\pm 10$	20	0.796	2.80	700.0	1.08	1.00	7
SRR1260-471K	470.0	$\pm 10$	18	0.796	2.60	820.0	0.95	0.90	6
SRR1260-561K	560.0	$\pm 10$	22	0.796	2.40	1000.0	0.88	0.80	6
SRR1260-681K	680.0	$\pm 10$	18	0.796	2.20	1150.0	0.80	0.75	5
SRR1260-821K	820.0	$\pm 10$	20	0.796	2.00	1500.0	0.73	0.63	5
SRR1260-102K	1000.0	$\pm 10$	30	0.252	1.80	1700.0	0.68	0.60	4

\*\*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.

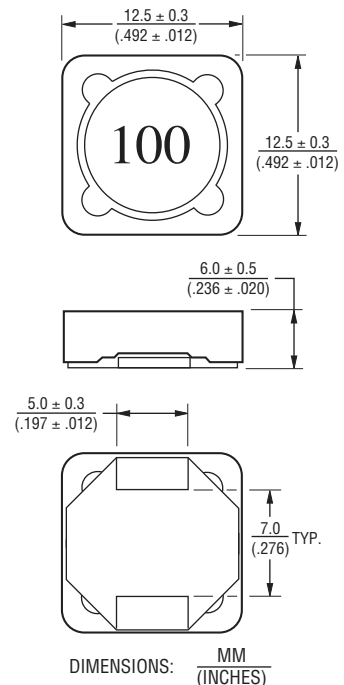
## General Specifications

Inductance Test Frequency / Voltage  
 SRR1260-1R0Y to -8R2Y ... 100 kHz/0.1 V  
 SRR1260-100M to -102K ..... 1 kHz/0.1 V  
 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.  
 Temperature Rise  
 ..... 40 °C max. at rated I rms  
 Inductance Drop ..... 25 % typ. at I sat  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

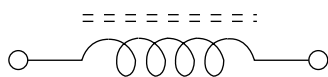
## Materials

Core ..... Ferrite DR and RI  
 Wire ..... Enamelled copper wire  
 Terminal ..... Cu/Ni/Sn  
 Packaging ..... 600 pcs. per reel

## Product Dimensions

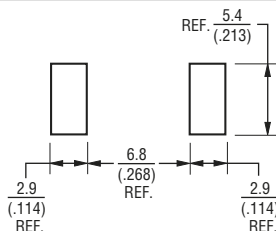


## Electrical Schematic



**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Recommended Layout



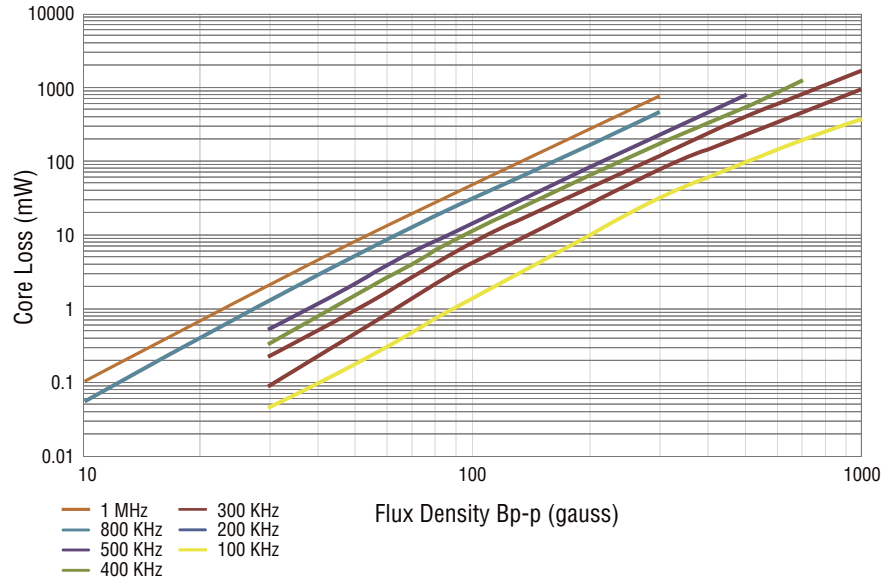
\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

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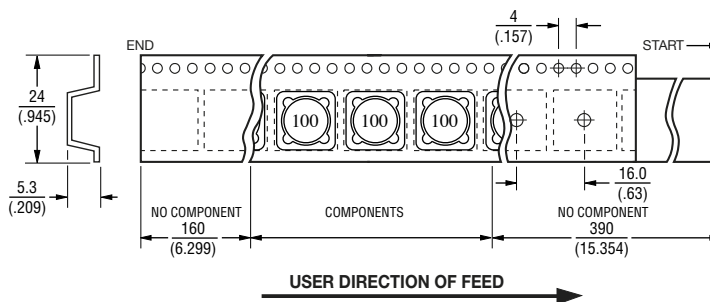
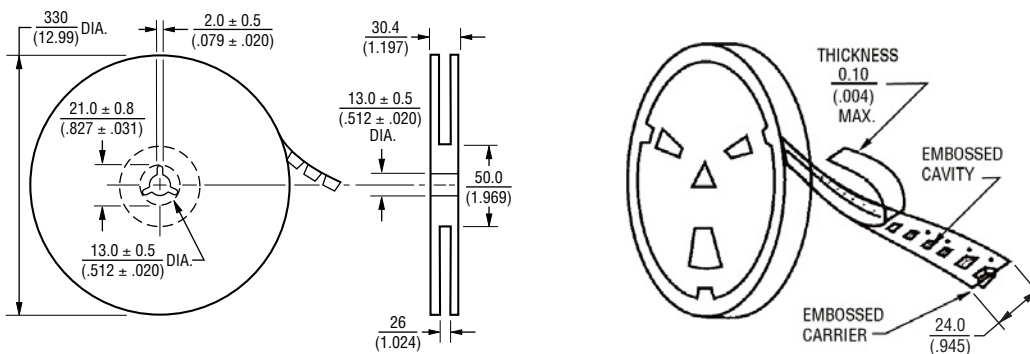
# SRR1260 Series - Shielded SMD Power Inductors

**BOURNS®**

## Core Loss vs. Flux Density



## Packaging Specifications



QTY: 600 PCS. PER REEL

REV. 05/18

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Users should verify actual device performance in their specific applications.

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