



## 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
  - Car radios

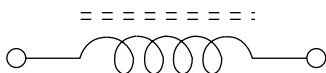
## SRR1260 Series - Shielded SMD Power Inductors

### Electrical Specifications

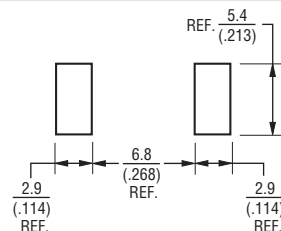
| Bourns Part Number | Inductance        |          | Q (Typ.) | Test Freq. (MHz) | SRF Typ. (MHz) | RDC Max. (m $\Omega$ ) | I rms Max. (A) | I sat Typ. (A) | **K-Factor |
|--------------------|-------------------|----------|----------|------------------|----------------|------------------------|----------------|----------------|------------|
|                    | ( $\mu\text{H}$ ) | 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,  $B_p$  (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.

### Electrical Schematic



### Recommended Layout



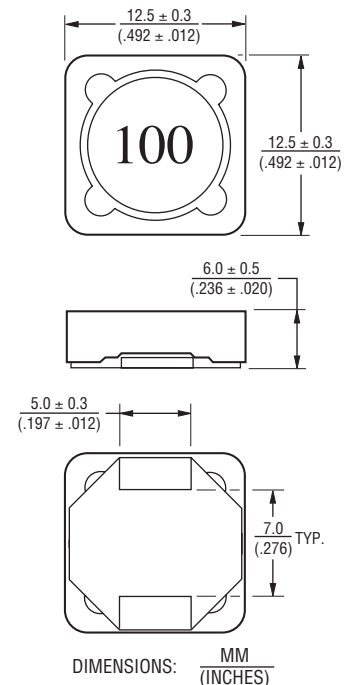
### General Specifications

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 130  
 Terminal ..... Cu/Ni/Sn  
 Packaging ..... 600 pcs. per reel

### Product Dimensions

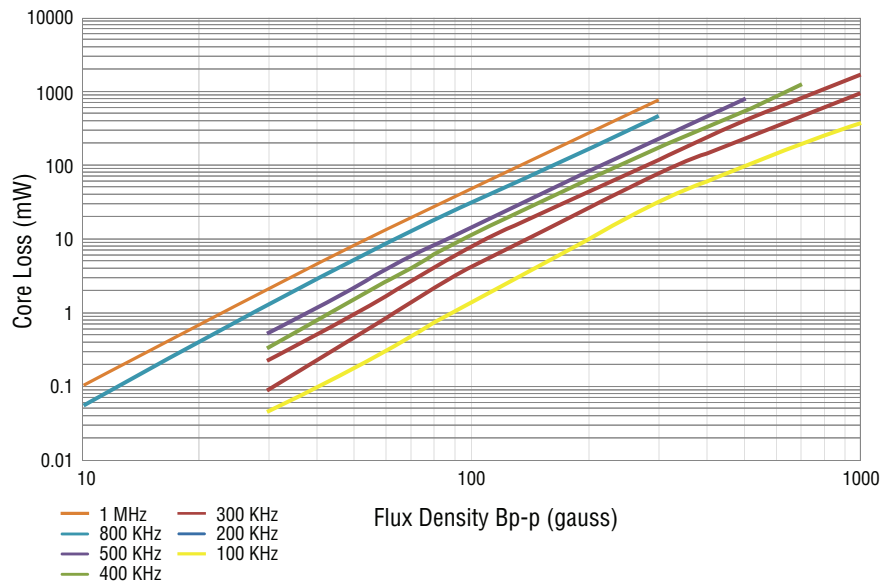


\* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

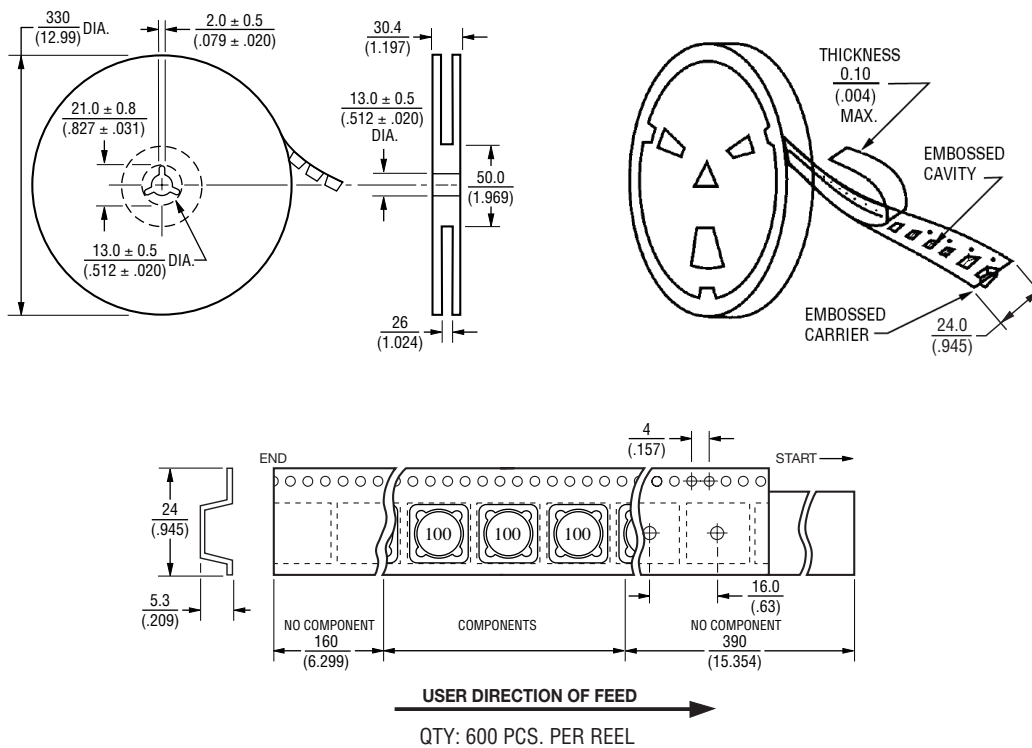
# SRR1260 Series - Shielded SMD Power Inductors

**BOURNS®**

## Core Loss vs. Flux Density



## Packaging Specifications



REV. 08/17

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