



## Features

- Available in E6 series
- Unit height of 8.5 mm
- Current rating up to 7.5 A
- RoHS compliant\*

## Applications

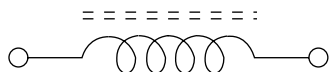
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs

## SRR1208 Series - Shielded High Power Inductors

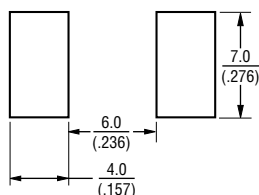
### Electrical Characteristics

| Bourns Part No. | Inductance 1 KHz |          | Q Ref. | Test Frequency (MHz) | SRF Min. (MHz) | RDC Max. ( $\Omega$ ) | I rms Max. (A) | I sat Typ. (A) |
|-----------------|------------------|----------|--------|----------------------|----------------|-----------------------|----------------|----------------|
|                 | ( $\mu$ H)       | Tol. %   |        |                      |                |                       |                |                |
| SRR1208-2R5ML   | 2.5              | $\pm 20$ | 20     | 7.96                 | 37             | 0.011                 | 7.50           | 10.00          |
| SRR1208-4R5ML   | 4.5              | $\pm 20$ | 24     | 7.96                 | 30             | 0.014                 | 6.50           | 10.00          |
| SRR1208-6R5ML   | 6.5              | $\pm 20$ | 25     | 7.96                 | 20             | 0.018                 | 6.00           | 8.40           |
| SRR1208-100ML   | 10               | $\pm 20$ | 20     | 2.52                 | 15             | 0.021                 | 5.00           | 6.70           |
| SRR1208-120ML   | 12               | $\pm 20$ | 19     | 2.52                 | 11             | 0.025                 | 4.80           | 6.50           |
| SRR1208-150ML   | 15               | $\pm 20$ | 21     | 2.52                 | 11             | 0.036                 | 4.00           | 5.60           |
| SRR1208-180ML   | 18               | $\pm 20$ | 21     | 2.52                 | 9.0            | 0.040                 | 3.80           | 4.00           |
| SRR1208-220ML   | 22               | $\pm 20$ | 23     | 2.52                 | 7.0            | 0.043                 | 3.50           | 4.00           |
| SRR1208-270ML   | 27               | $\pm 20$ | 23     | 2.52                 | 6.5            | 0.048                 | 3.00           | 4.30           |
| SRR1208-330YL   | 33               | $\pm 15$ | 23     | 2.52                 | 6.5            | 0.062                 | 2.80           | 3.80           |
| SRR1208-390YL   | 39               | $\pm 15$ | 25     | 2.52                 | 6.0            | 0.076                 | 2.50           | 3.40           |
| SRR1208-470YL   | 47               | $\pm 15$ | 24     | 2.52                 | 5.0            | 0.085                 | 2.20           | 3.10           |
| SRR1208-560YL   | 56               | $\pm 15$ | 23     | 2.52                 | 5.0            | 0.110                 | 2.00           | 2.80           |
| SRR1208-680YL   | 68               | $\pm 15$ | 20     | 2.52                 | 5.0            | 0.135                 | 1.80           | 2.60           |
| SRR1208-820YL   | 82               | $\pm 15$ | 18     | 2.52                 | 4.0            | 0.150                 | 1.60           | 2.30           |
| SRR1208-101YL   | 100              | $\pm 15$ | 15     | 0.796                | 4.0            | 0.170                 | 1.50           | 2.10           |
| SRR1208-121YL   | 120              | $\pm 15$ | 15     | 0.796                | 3.0            | 0.190                 | 1.40           | 2.00           |
| SRR1208-151YL   | 150              | $\pm 15$ | 14     | 0.796                | 3.0            | 0.240                 | 1.30           | 1.72           |
| SRR1208-181YL   | 180              | $\pm 15$ | 14     | 0.796                | 2.5            | 0.270                 | 1.20           | 1.70           |
| SRR1208-221KL   | 220              | $\pm 10$ | 13     | 0.796                | 2.5            | 0.380                 | 1.10           | 1.45           |
| SRR1208-271KL   | 270              | $\pm 10$ | 13     | 0.796                | 2.0            | 0.400                 | 0.95           | 1.25           |
| SRR1208-331KL   | 330              | $\pm 10$ | 13     | 0.796                | 1.8            | 0.650                 | 0.85           | 1.12           |
| SRR1208-391KL   | 390              | $\pm 10$ | 14     | 0.796                | 1.6            | 0.670                 | 0.80           | 1.10           |
| SRR1208-471KL   | 470              | $\pm 10$ | 14     | 0.796                | 1.4            | 0.850                 | 0.70           | 0.95           |
| SRR1208-561KL   | 560              | $\pm 10$ | 14     | 0.796                | 1.4            | 0.900                 | 0.65           | 0.90           |
| SRR1208-681KL   | 680              | $\pm 10$ | 13     | 0.796                | 1.2            | 1.00                  | 0.60           | 0.82           |
| SRR1208-821KL   | 820              | $\pm 10$ | 12     | 0.796                | 1.2            | 1.15                  | 0.55           | 0.77           |
| SRR1208-102KL   | 1000             | $\pm 10$ | 11     | 0.252                | 1.0            | 1.65                  | 0.50           | 0.67           |
| SRR1208-122KL   | 1200             | $\pm 10$ | 10     | 0.252                | 0.80           | 2.00                  | 0.40           | 0.57           |
| SRR1208-152KL   | 1500             | $\pm 10$ | 10     | 0.252                | 0.75           | 2.35                  | 0.36           | 0.55           |
| SRR1208-182KL   | 1800             | $\pm 10$ | 20     | 0.252                | 0.70           | 3.40                  | 0.46           | 0.48           |
| SRR1208-222KL   | 2200             | $\pm 10$ | 20     | 0.252                | 0.65           | 4.20                  | 0.40           | 0.42           |
| SRR1208-272KL   | 2700             | $\pm 10$ | 20     | 0.252                | 0.60           | 5.20                  | 0.35           | 0.38           |
| SRR1208-332KL   | 3300             | $\pm 10$ | 20     | 0.252                | 0.50           | 6.40                  | 0.32           | 0.35           |
| SRR1208-392KL   | 3900             | $\pm 10$ | 20     | 0.252                | 0.45           | 7.80                  | 0.30           | 0.32           |
| SRR1208-472KL   | 4700             | $\pm 10$ | 20     | 0.252                | 0.42           | 9.60                  | 0.28           | 0.30           |
| SRR1208-562KL   | 5600             | $\pm 10$ | 18     | 0.252                | 0.40           | 12.0                  | 0.25           | 0.28           |
| SRR1208-682KL   | 6800             | $\pm 10$ | 18     | 0.252                | 0.38           | 15.2                  | 0.22           | 0.25           |
| SRR1208-822KL   | 8200             | $\pm 10$ | 16     | 0.252                | 0.35           | 17.0                  | 0.20           | 0.22           |
| SRR1208-103KL   | 10000            | $\pm 10$ | 24     | 0.0796               | 0.30           | 19.2                  | 0.18           | 0.20           |

### Schematic



### Recommended Layout



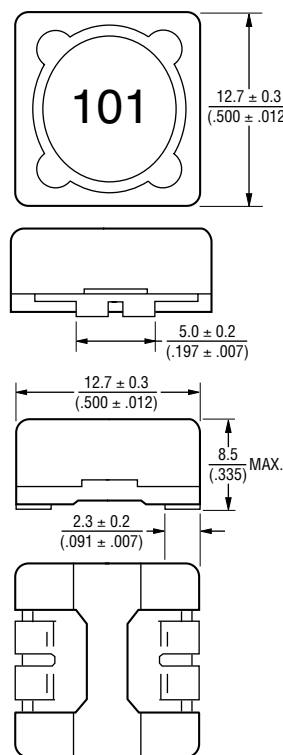
### General Specifications

Test Voltage ..... 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 5 sec.  
 Rated Current ..... Ind. drop of 10 % typ. at Isat  
 Temperature Rise ..... 40 °C max. at rated I rms

### Materials

Core ..... Ferrite DR & RI core  
 Wire ..... Enameled copper  
 Base ..... LCP E4008  
 Terminal ..... Cu/Ni/Sn  
 Packaging ..... 400 pcs. per reel

### Product Dimensions



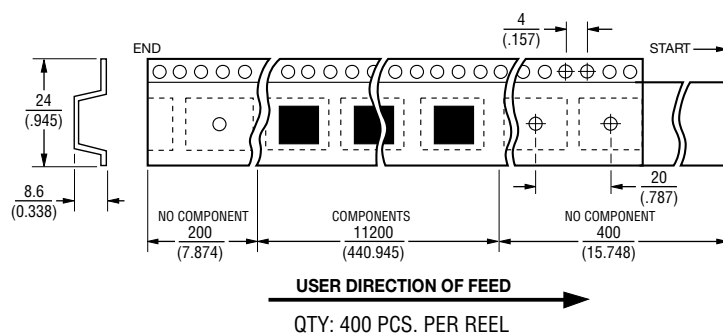
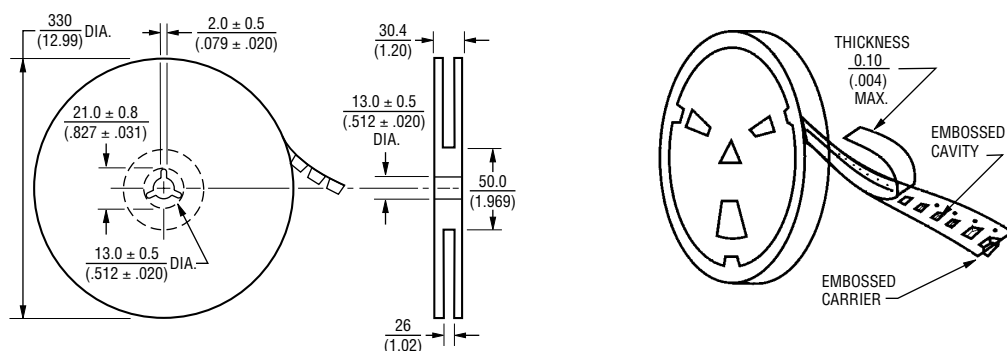
DIMENSIONS:  $\frac{\text{MM}}{(\text{INCHES})}$

\*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.

# SRR1208 Series - Shielded High Power Inductors

**BOURNS®**

## Packaging Specifications



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

REV. 01/17

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