



## 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<br>Ref. | Test<br>Frequency<br>(MHz) | SRF<br>Min.<br>(MHz) | RDC<br>Max.<br>(Ω) | I rms<br>Max.<br>(A) | I sat<br>Typ.<br>(A) |
|-----------------|------------------|--------|-----------|----------------------------|----------------------|--------------------|----------------------|----------------------|
|                 | (μH)             | Tol. % |           |                            |                      |                    |                      |                      |
| SRR1208-2R5ML   | 2.5              | ± 20   | 20        | 7.96                       | 37                   | 0.011              | 7.50                 | 10.00                |
| SRR1208-4R5ML   | 4.5              | ± 20   | 24        | 7.96                       | 30                   | 0.014              | 6.50                 | 10.00                |
| SRR1208-6R5ML   | 6.5              | ± 20   | 25        | 7.96                       | 20                   | 0.018              | 6.00                 | 8.40                 |
| SRR1208-100ML   | 10               | ± 20   | 20        | 2.52                       | 15                   | 0.021              | 5.00                 | 6.70                 |
| SRR1208-120ML   | 12               | ± 20   | 19        | 2.52                       | 11                   | 0.025              | 4.80                 | 6.50                 |
| SRR1208-150ML   | 15               | ± 20   | 21        | 2.52                       | 11                   | 0.036              | 4.00                 | 5.60                 |
| SRR1208-180ML   | 18               | ± 20   | 21        | 2.52                       | 9.0                  | 0.040              | 3.80                 | 4.00                 |
| SRR1208-220ML   | 22               | ± 20   | 23        | 2.52                       | 7.0                  | 0.043              | 3.50                 | 4.00                 |
| SRR1208-270ML   | 27               | ± 20   | 23        | 2.52                       | 6.5                  | 0.048              | 3.00                 | 4.30                 |
| SRR1208-330YL   | 33               | ± 15   | 23        | 2.52                       | 6.5                  | 0.062              | 2.80                 | 3.80                 |
| SRR1208-390YL   | 39               | ± 15   | 25        | 2.52                       | 6.0                  | 0.076              | 2.50                 | 3.40                 |
| SRR1208-470YL   | 47               | ± 15   | 24        | 2.52                       | 5.0                  | 0.085              | 2.20                 | 3.10                 |
| SRR1208-560YL   | 56               | ± 15   | 23        | 2.52                       | 5.0                  | 0.110              | 2.00                 | 2.80                 |
| SRR1208-680YL   | 68               | ± 15   | 20        | 2.52                       | 5.0                  | 0.135              | 1.80                 | 2.60                 |
| SRR1208-820YL   | 82               | ± 15   | 18        | 2.52                       | 4.0                  | 0.150              | 1.60                 | 2.30                 |
| SRR1208-101YL   | 100              | ± 15   | 15        | 0.796                      | 4.0                  | 0.170              | 1.50                 | 2.10                 |
| SRR1208-121YL   | 120              | ± 15   | 15        | 0.796                      | 3.0                  | 0.190              | 1.40                 | 2.00                 |
| SRR1208-151YL   | 150              | ± 15   | 14        | 0.796                      | 3.0                  | 0.240              | 1.30                 | 1.72                 |
| SRR1208-181YL   | 180              | ± 15   | 14        | 0.796                      | 2.5                  | 0.270              | 1.20                 | 1.70                 |
| SRR1208-221KL   | 220              | ± 10   | 13        | 0.796                      | 2.5                  | 0.380              | 1.10                 | 1.45                 |
| SRR1208-271KL   | 270              | ± 10   | 13        | 0.796                      | 2.0                  | 0.400              | 0.95                 | 1.25                 |
| SRR1208-331KL   | 330              | ± 10   | 13        | 0.796                      | 1.8                  | 0.650              | 0.85                 | 1.12                 |
| SRR1208-391KL   | 390              | ± 10   | 14        | 0.796                      | 1.6                  | 0.670              | 0.80                 | 1.10                 |
| SRR1208-471KL   | 470              | ± 10   | 14        | 0.796                      | 1.4                  | 0.850              | 0.70                 | 0.95                 |
| SRR1208-561KL   | 560              | ± 10   | 14        | 0.796                      | 1.4                  | 0.900              | 0.65                 | 0.90                 |
| SRR1208-681KL   | 680              | ± 10   | 13        | 0.796                      | 1.2                  | 1.00               | 0.60                 | 0.82                 |
| SRR1208-821KL   | 820              | ± 10   | 12        | 0.796                      | 1.2                  | 1.15               | 0.55                 | 0.77                 |
| SRR1208-102KL   | 1000             | ± 10   | 11        | 0.252                      | 1.0                  | 1.65               | 0.50                 | 0.67                 |
| SRR1208-122KL   | 1200             | ± 10   | 10        | 0.252                      | 0.80                 | 2.00               | 0.40                 | 0.57                 |
| SRR1208-152KL   | 1500             | ± 10   | 10        | 0.252                      | 0.75                 | 2.35               | 0.36                 | 0.55                 |
| SRR1208-182KL   | 1800             | ± 10   | 20        | 0.252                      | 0.70                 | 3.40               | 0.46                 | 0.48                 |
| SRR1208-222KL   | 2200             | ± 10   | 20        | 0.252                      | 0.65                 | 4.20               | 0.40                 | 0.42                 |
| SRR1208-272KL   | 2700             | ± 10   | 20        | 0.252                      | 0.60                 | 5.20               | 0.35                 | 0.38                 |
| SRR1208-332KL   | 3300             | ± 10   | 20        | 0.252                      | 0.50                 | 6.40               | 0.32                 | 0.35                 |
| SRR1208-392KL   | 3900             | ± 10   | 20        | 0.252                      | 0.45                 | 7.80               | 0.30                 | 0.32                 |
| SRR1208-472KL   | 4700             | ± 10   | 20        | 0.252                      | 0.42                 | 9.60               | 0.28                 | 0.30                 |
| SRR1208-562KL   | 5600             | ± 10   | 18        | 0.252                      | 0.40                 | 12.0               | 0.25                 | 0.28                 |
| SRR1208-682KL   | 6800             | ± 10   | 18        | 0.252                      | 0.38                 | 15.2               | 0.22                 | 0.25                 |
| SRR1208-822KL   | 8200             | ± 10   | 16        | 0.252                      | 0.35                 | 17.0               | 0.20                 | 0.22                 |
| SRR1208-103KL   | 10000            | ± 10   | 24        | 0.0796                     | 0.30                 | 19.2               | 0.18                 | 0.20                 |

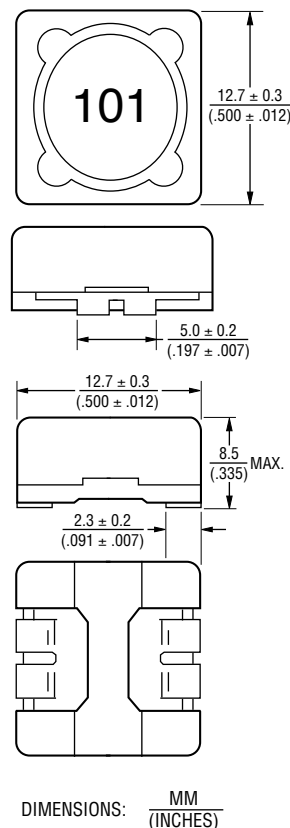
## General Specifications

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 Irms

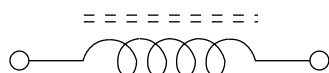
## Materials

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

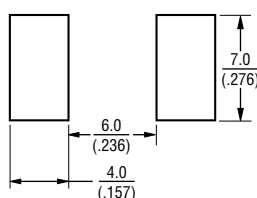
## Product Dimensions



## Schematic



## Recommended Layout



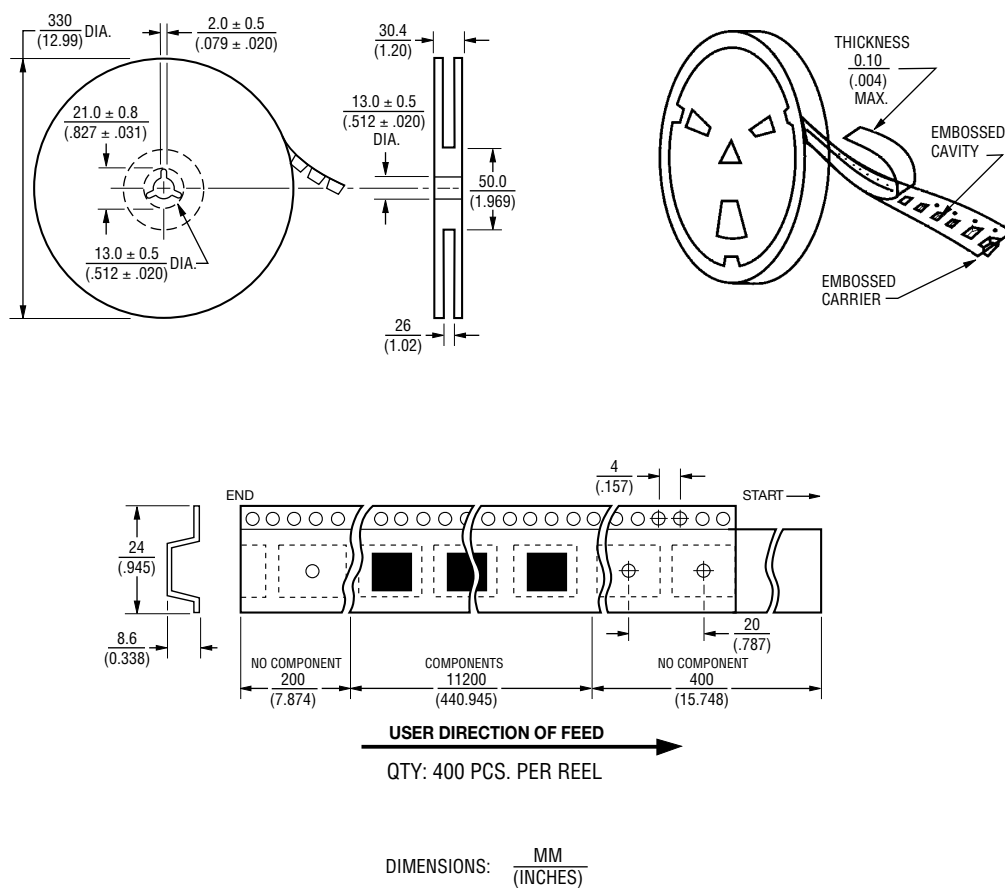
**WARNING Cancer and Reproductive Harm**  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.  
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# SRR1208 Series - Shielded High Power Inductors

**BOURNS®**

## Packaging Specifications



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REV. 01/17

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