



Features

- Shielded construction
- Inductance range: 1.5 to 330 μ H
- Heating current up to 7 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

SRU1048A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

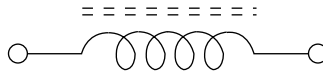
| Bourns Part Number | Inductance @ 100 KHz / 1 V | | Q (Ref.) | Test Freq. (MHz) | SRF (MHz) Typ. | DCR (m Ω) Max. | I rms (A) | I sat (A) |
|--------------------|----------------------------|----------|----------|------------------|----------------|------------------------|-----------|-----------|
| | L (μ H) | Tol. (%) | | | | | | |
| SRU1048A-1R5Y | 1.5 | ± 30 | 14 | 7.96 | 70 | 5.8 | 7.0 | 7.2 |
| SRU1048A-2R2Y | 2.2 | ± 30 | 14 | 7.96 | 55 | 7.2 | 6.5 | 6.3 |
| SRU1048A-3R0Y | 3.0 | ± 30 | 14 | 7.96 | 40 | 10 | 6.2 | 6.0 |
| SRU1048A-4R7Y | 4.7 | ± 30 | 12 | 7.96 | 30 | 12.5 | 5.5 | 4.75 |
| SRU1048A-6R8Y | 6.8 | ± 30 | 10 | 7.96 | 20 | 18 | 4.8 | 4.1 |
| SRU1048A-8R2Y | 8.2 | ± 30 | 8 | 7.96 | 18 | 20 | 4.6 | 3.8 |
| SRU1048A-100Y | 10 | ± 30 | 26 | 2.52 | 16 | 25 | 4.5 | 3.7 |
| SRU1048A-150Y | 15 | ± 30 | 30 | 2.52 | 14 | 40 | 3.2 | 2.7 |
| SRU1048A-220Y | 22 | ± 30 | 22 | 2.52 | 12 | 55 | 2.6 | 2.0 |
| SRU1048A-330Y | 33 | ± 30 | 24 | 2.52 | 10 | 84 | 2.1 | 1.7 |
| SRU1048A-470Y | 47 | ± 30 | 26 | 2.52 | 8 | 120 | 1.7 | 1.5 |
| SRU1048A-560Y | 56 | ± 30 | 26 | 2.52 | 7 | 145 | 1.6 | 1.4 |
| SRU1048A-680Y | 68 | ± 30 | 24 | 2.52 | 6 | 170 | 1.4 | 1.25 |
| SRU1048A-820Y | 82 | ± 30 | 24 | 2.52 | 5.5 | 200 | 1.3 | 1.1 |
| SRU1048A-101Y | 100 | ± 30 | 26 | 0.796 | 5 | 220 | 1.2 | 1.0 |
| SRU1048A-151Y | 150 | ± 30 | 24 | 0.796 | 4.5 | 305 | 1.0 | 0.8 |
| SRU1048A-221Y | 220 | ± 30 | 20 | 0.796 | 4 | 455 | 0.8 | 0.7 |
| SRU1048A-331Y | 330 | ± 30 | 18 | 0.796 | 3 | 640 | 0.65 | 0.52 |

How to Order

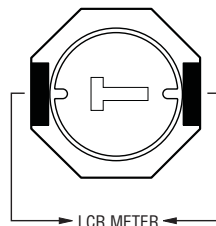
SRU1048A - 100Y

Model _____
Value Code (see table) _____

Electrical Schematic



Inductor Connection



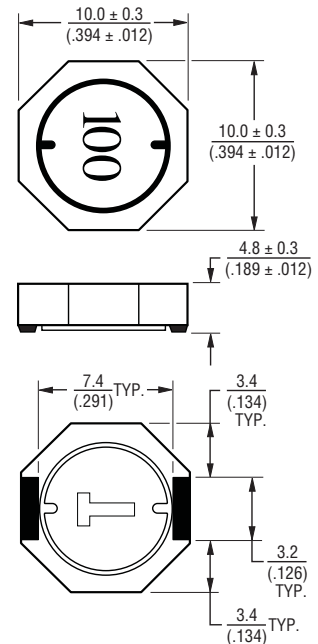
General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -40 °C to +125 °C
Resistance to Soldering Heat +245 °C for 10 sec.
Temperature Rise 30 °C typ. at rated I rms
Inductance Drop 35 % typ. at I sat

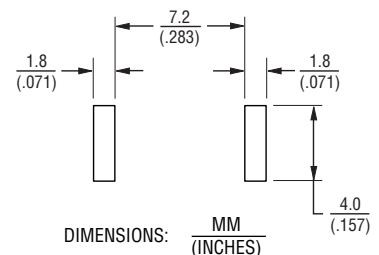
Materials

Core Ferrite
Wire Enamelled copper
Terminal Finish Ag/Ni/Sn
Packaging 600 pcs. per reel

Product Dimensions



Recommended Layout



BOURNS®

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Europe: Tel: +41-41 768 5555 • Fax: +41-41 768 5510

The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700

www.bourns.com



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

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

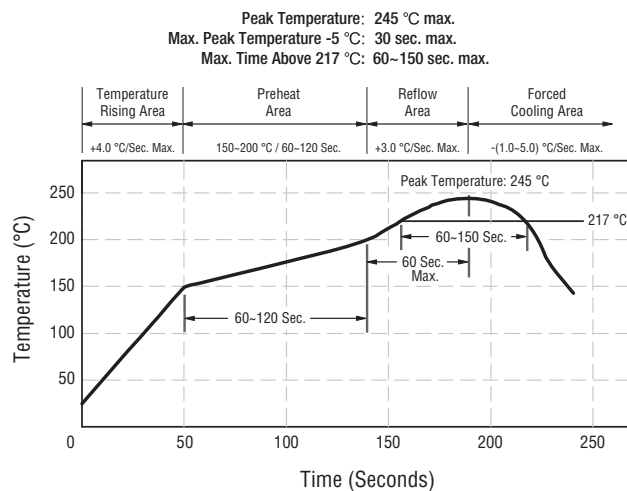
**Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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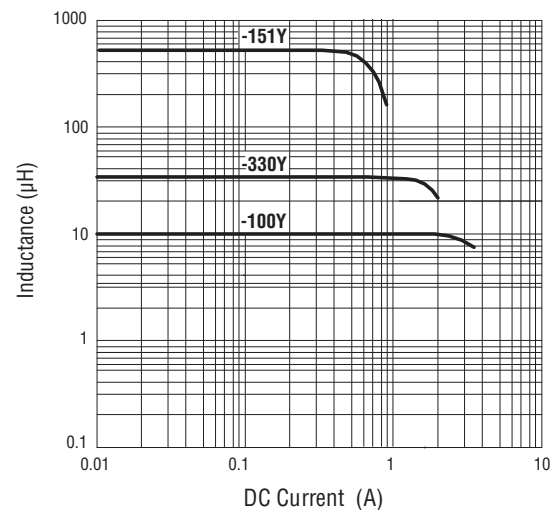
SRU1048A Series - Shielded Power Inductors

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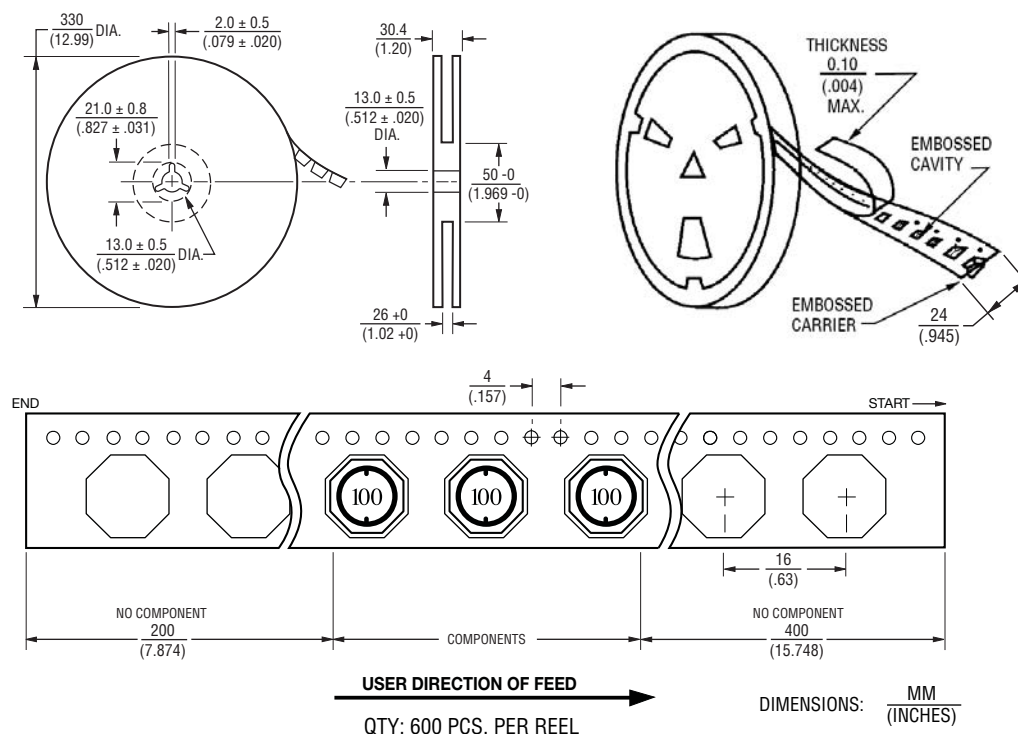
Soldering Profile



Inductance vs. DC Current Plot



Packaging Specifications



08/13

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