



Features

- Shielded construction
- Inductance range: 10 to 1000 μ H
- Heating current up to 2.1 A
- Dimensions: 7.3 x 7.3 x 4.5 mm
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

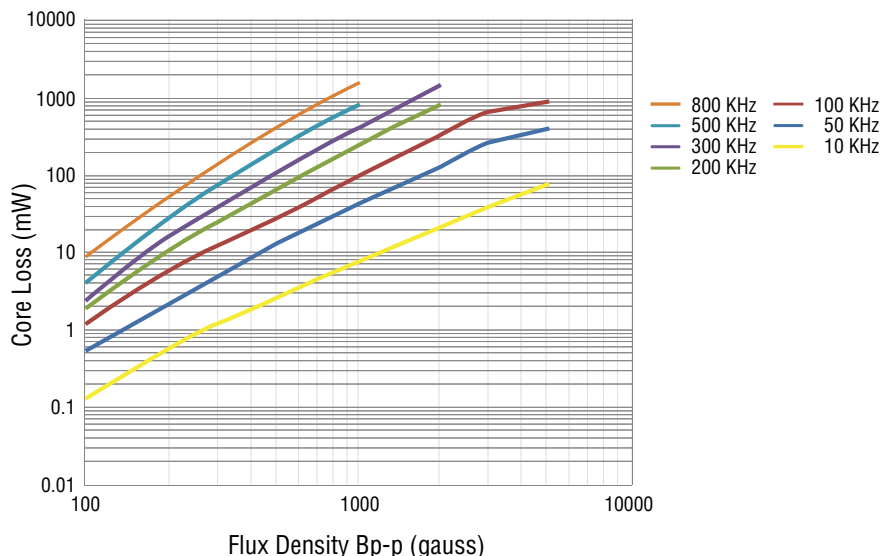
SRR0745A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part Number | Inductance @ 1 kHz / 1 V | | DCR (Ω) Max. | I rms (A) | I sat (A) | ***K- Factor |
|-----------------------|-----------------------------|----------|-----------------------------|--------------|--------------|-----------------|
| | L (μ H) | Tol. (%) | | | | |
| SRR0745A-100M | 10 | ± 20 | 0.052 | 2.1 | 2.5 | 112 |
| SRR0745A-120M | 12 | ± 20 | 0.062 | 2.0 | 2.3 | 98 |
| SRR0745A-150M | 15 | ± 20 | 0.075 | 1.9 | 2.1 | 88 |
| SRR0745A-180M | 18 | ± 20 | 0.09 | 1.8 | 1.95 | 83 |
| SRR0745A-220M | 22 | ± 20 | 0.096 | 1.65 | 1.75 | 72 |
| SRR0745A-270M | 27 | ± 20 | 0.13 | 1.45 | 1.62 | 66 |
| SRR0745A-330M | 33 | ± 20 | 0.15 | 1.35 | 1.45 | 59 |
| SRR0745A-390M | 39 | ± 20 | 0.19 | 1.17 | 1.3 | 55 |
| SRR0745A-470M | 47 | ± 20 | 0.21 | 1.05 | 1.2 | 50 |
| SRR0745A-560M | 56 | ± 20 | 0.24 | 0.95 | 1.1 | 47 |
| SRR0745A-680M | 68 | ± 20 | 0.3 | 0.86 | 0.96 | 41 |
| SRR0745A-820M | 82 | ± 20 | 0.4 | 0.78 | 0.9 | 38 |
| SRR0745A-101M | 100 | ± 20 | 0.45 | 0.7 | 0.78 | 34 |
| SRR0745A-121M | 120 | ± 20 | 0.55 | 0.6 | 0.7 | 32 |
| SRR0745A-151M | 150 | ± 20 | 0.76 | 0.48 | 0.58 | 29 |
| SRR0745A-181M | 180 | ± 20 | 0.82 | 0.46 | 0.54 | 26 |
| SRR0745A-221M | 220 | ± 20 | 0.95 | 0.42 | 0.5 | 23 |
| SRR0745A-271M | 270 | ± 20 | 1.2 | 0.38 | 0.46 | 22 |
| SRR0745A-331M | 330 | ± 20 | 1.5 | 0.34 | 0.4 | 20 |
| SRR0745A-391M | 390 | ± 20 | 1.85 | 0.32 | 0.36 | 18 |
| SRR0745A-471M | 470 | ± 20 | 2.2 | 0.29 | 0.34 | 16 |
| SRR0745A-561M | 560 | ± 20 | 2.6 | 0.26 | 0.3 | 15 |
| SRR0745A-681M | 680 | ± 20 | 2.8 | 0.24 | 0.28 | 13 |
| SRR0745A-821M | 820 | ± 20 | 3.5 | 0.22 | 0.26 | 12 |
| SRR0745A-102M | 1000 | ± 20 | 4.1 | 0.2 | 0.24 | 11 |

***K-Factor: To calculate core flux density, Bp-p (gauss) = $K \times L(\mu H) \times \Delta I$ (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density



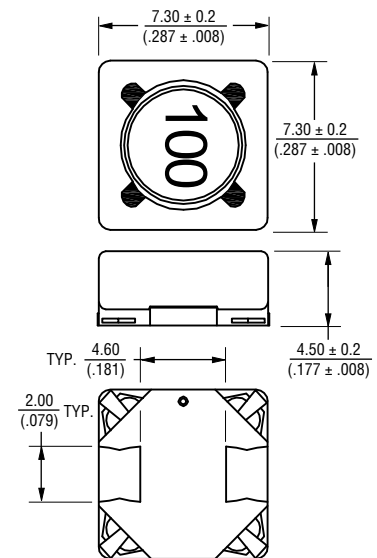
General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -40 °C to +125 °C
Resistance to Solder Heat +250 °C for 10 sec.
Temperature Rise 40 °C typ. at rated I rms
Inductance drop 25 % at I sat

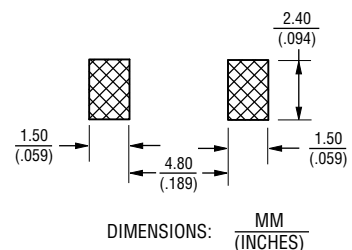
Materials

Core Ferrite
Wire Enameled copper
Terminal Finish Sn
Packaging 1000 pcs. per reel

Product Dimensions



Recommended Layout



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.

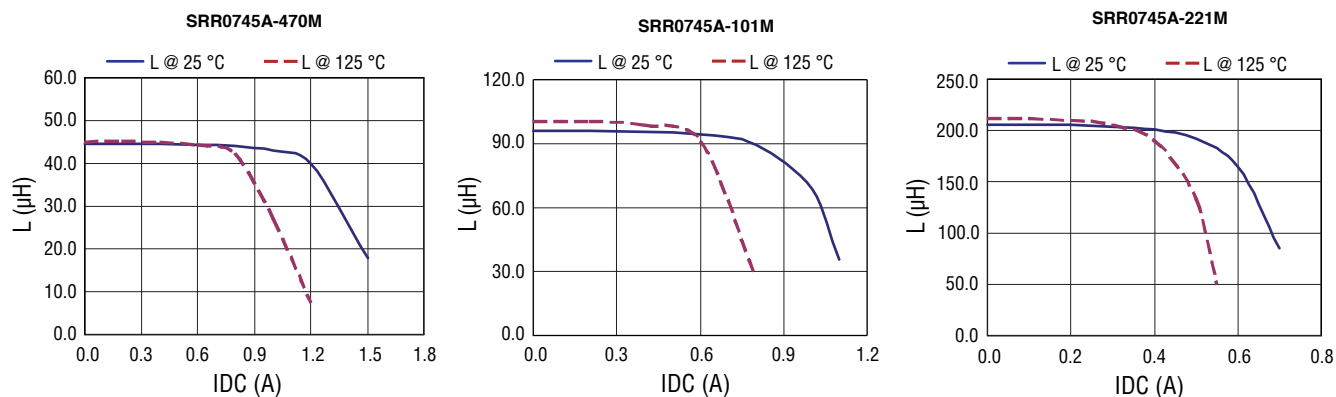
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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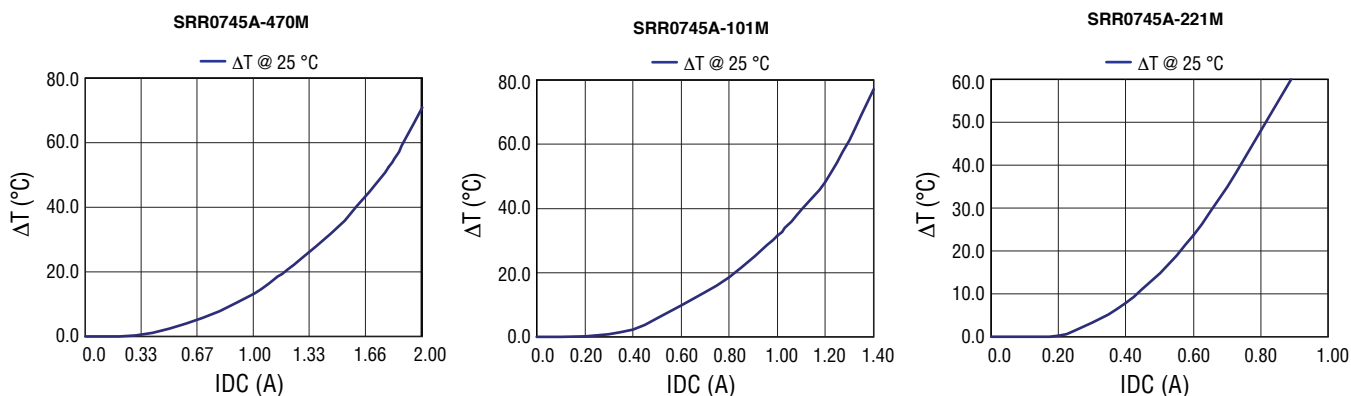
SRR0745A Series - Shielded Power Inductors

BOURNS®

Inductance vs. IDC



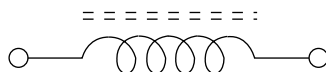
Temperature Rise vs. IDC



How to Order

Model SRR0745A - 100M
Value Code (see table) _____

Electrical Schematic



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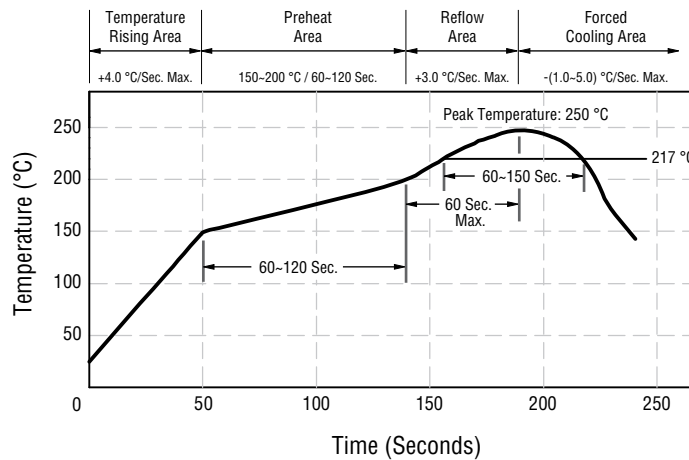
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SRR0745A Series - Shielded Power Inductors

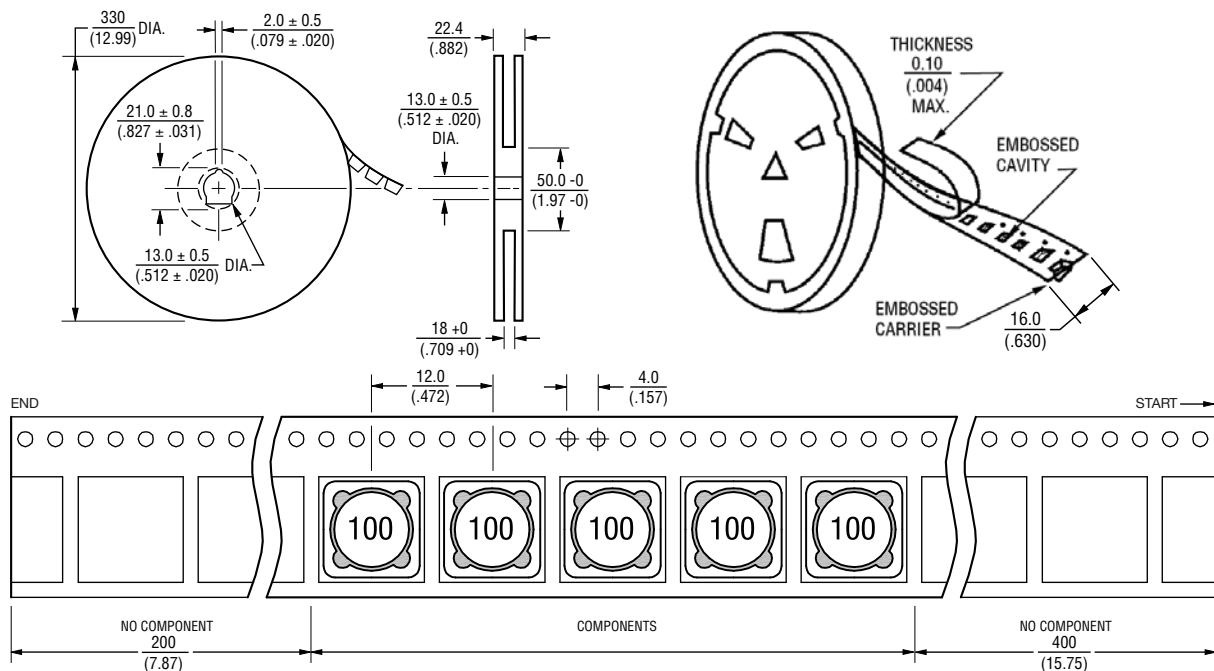
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Soldering Profile

Peak Temperature: 250 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60~150 sec. max.



Packaging Specifications



USER DIRECTION OF FEED

QTY: 1000 PCS. PER REEL

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

REV. 02/17

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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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