Features

- Shielded construction
- Inductance range: 10 to 1000 μH
- 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**

BOURNS®

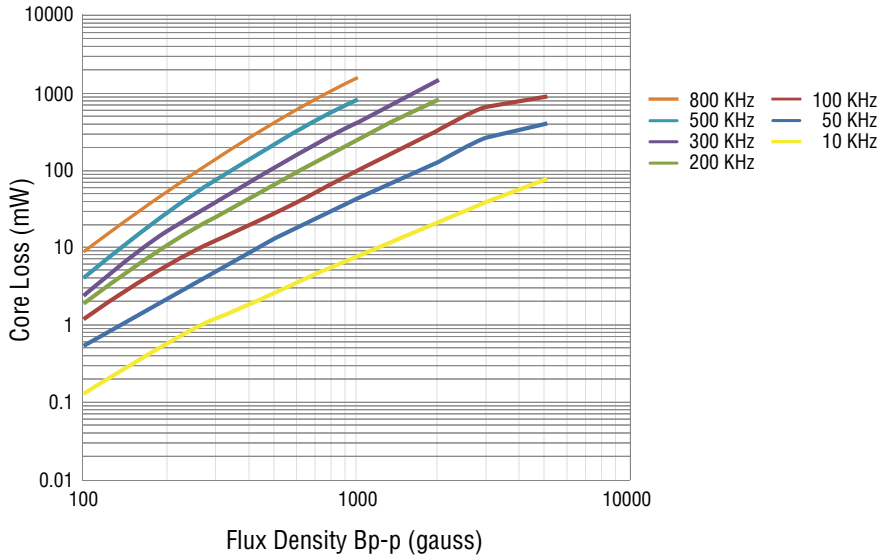
SRR0745A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 1 kHz / 1 V		DCR (Ω) Max.	I rms (A)	I sat (A)	***K-Factor
	L (μH)	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 x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

Core Loss vs. Flux Density



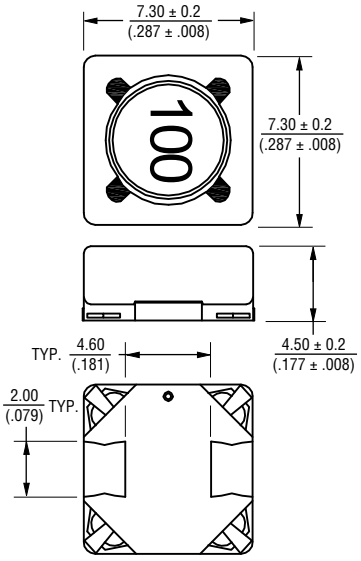
General Specifications

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 Irms
Inductance drop.....25 % at Isat

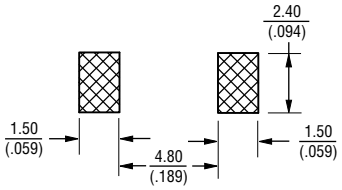
Materials

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

Product Dimensions



Recommended Layout



DIMENSIONS: MM / (INCHES)

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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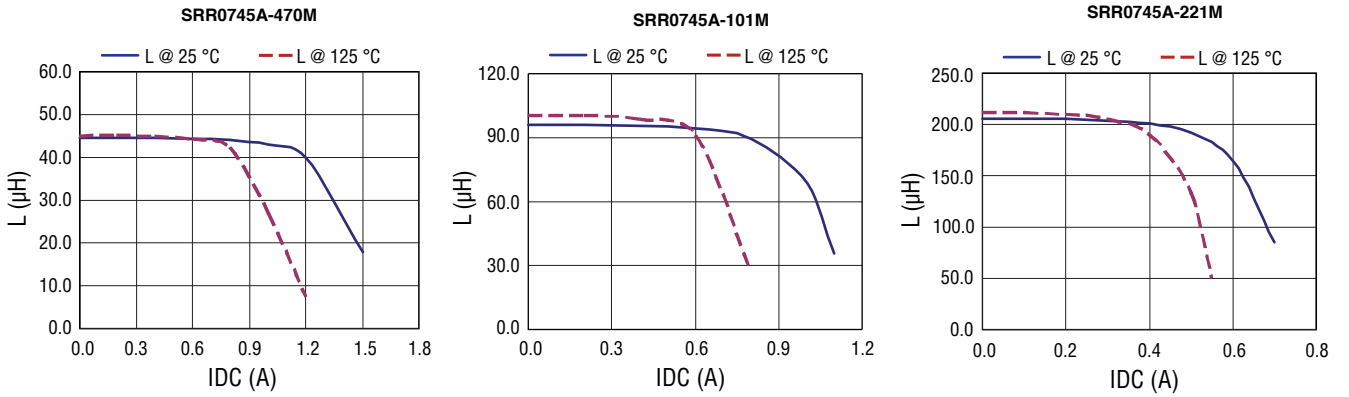
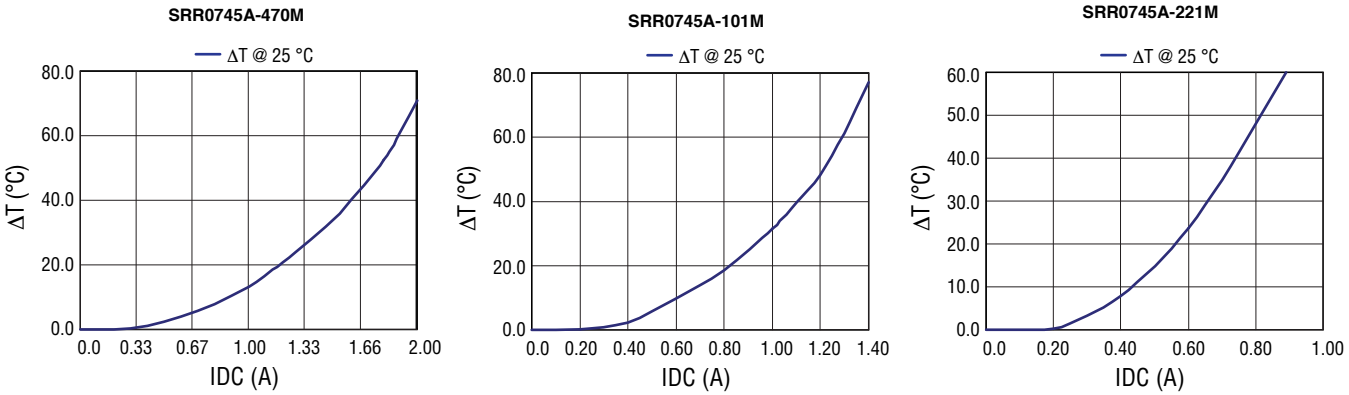
Inductance vs. IDC



Temperature Rise vs. IDC



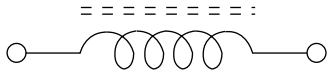
How to Order

SRR0745A - 100M

Model

Value Code (see table)

Electrical Schematic



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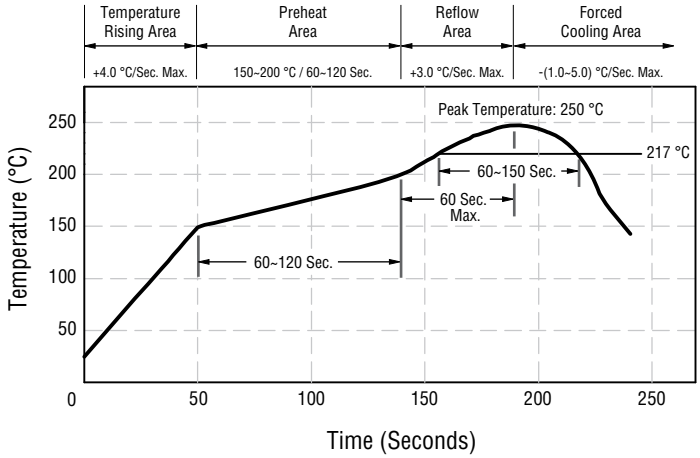
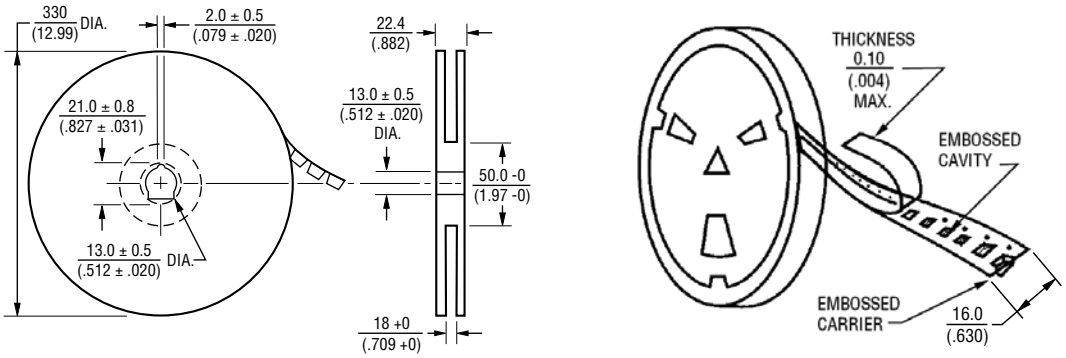
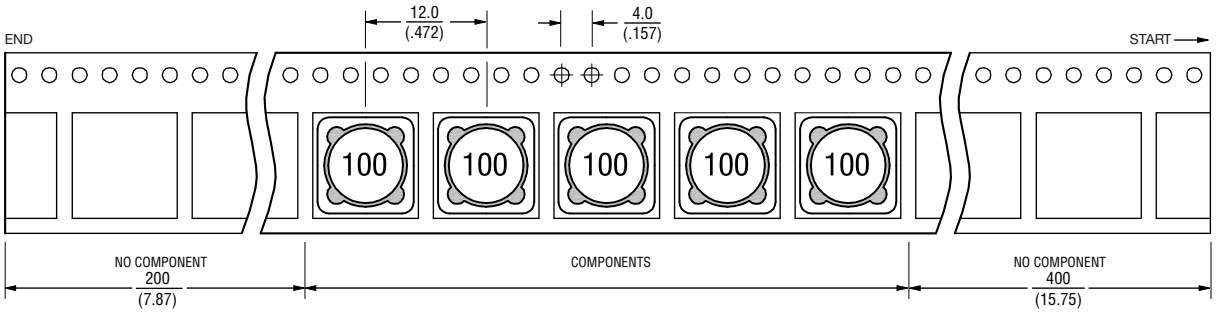
Soldering Profile

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: MM (INCHES)

REV. 02/17

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