



Features

- Shielded construction
- Inductance range: 0.68 to 330 μ H
- Heating current up to 9.5A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

- Automotive systems:
 - Driver assistant
 - Information
 - Entertainment
 - Lighting
- DC/DC converters
- Power supplies

SRR1050A Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 kHz/0.1V		SRF (MHz) Typ.	DCR (Ω)		I rms (A)	I sat (A)
	L (μ H)	Tol. (%)		Typ.	Max.		
SRR1050A-R68Y	0.68	± 30	110	0.0045	0.0055	9.50	13.5
SRR1050A-1R2Y	1.2	± 30	85	0.0058	0.007	8.30	10.5
SRR1050A-2R2Y	2.2	± 30	53	0.0071	0.009	7.20	8.20
SRR1050A-3R3Y	3.3	± 30	40	0.0086	0.011	6.50	7.80
SRR1050A-4R2Y	4.2	± 30	29	0.0104	0.014	6.10	6.40
SRR1050A-6R8Y	6.8	± 30	27	0.0151	0.019	5.40	5.40
SRR1050A-8R2Y	8.2	± 30	21	0.0181	0.022	5.00	4.85
SRR1050A-100Y	10	± 30	16.5	0.023	0.031	4.50	4.45
SRR1050A-120Y	12	± 30	15	0.026	0.035	3.80	4.00
SRR1050A-150Y	15	± 30	14	0.035	0.047	3.40	3.60
SRR1050A-180Y	18	± 30	11	0.038	0.051	3.10	3.20
SRR1050A-220Y	22	± 30	10.5	0.046	0.062	2.90	2.95
SRR1050A-270Y	27	± 30	10	0.057	0.077	2.60	2.70
SRR1050A-330Y	33	± 30	9	0.069	0.093	2.50	2.40
SRR1050A-390Y	39	± 30	6.8	0.079	0.106	2.25	2.30
SRR1050A-470Y	47	± 30	5.9	0.094	0.127	2.00	2.00
SRR1050A-560Y	56	± 30	5.5	0.124	0.160	1.90	1.90
SRR1050A-680Y	68	± 30	5	0.138	0.208	1.60	1.65
SRR1050A-820Y	82	± 30	4.5	0.150	0.230	1.45	1.50
SRR1050A-101Y	100	± 30	4.2	0.179	0.255	1.35	1.35
SRR1050A-121Y	120	± 30	3.8	0.213	0.305	1.18	1.28
SRR1050A-151Y	150	± 30	3.6	0.253	0.370	1.10	1.12
SRR1050A-181Y	180	± 30	3.4	0.307	0.420	1.00	1.04
SRR1050A-221Y	220	± 30	3	0.373	0.500	0.94	0.94
SRR1050A-271Y	270	± 30	2.4	0.491	0.675	0.80	0.84
SRR1050A-331Y	330	± 30	2	0.613	0.815	0.73	0.75

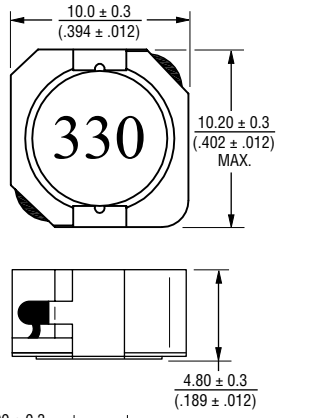
General Specifications

Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature .. -40 °C to +125 °C
 Temperature Rise 40 °C typ. at rated I rms
 Rated Current Inductance drops 35 % at I sat
 Failure In Time (FIT) 24.7/10⁹ hours
 Mean Time Between Failures (MTBF) 40.4 x 10⁶ hours

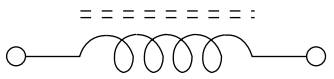
Materials

Core Ferrite
 Wire Enameled copper
 Terminal Finish Sn
 Packaging 700 pcs. per 13-inch reel

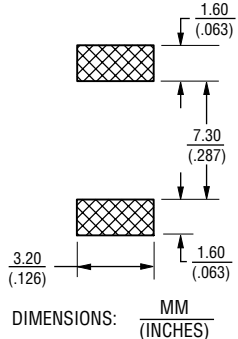
Product Dimensions



Electrical Schematic

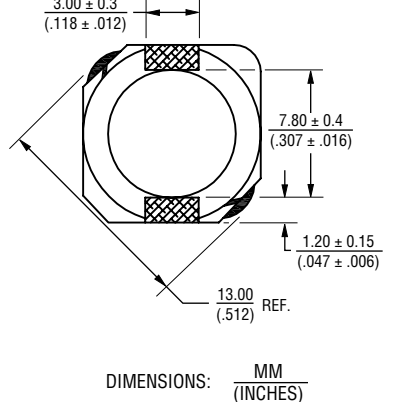


Recommended Layout



How to Order

SRR1050A - 101Y
 Model _____
 Value Code (see table) _____

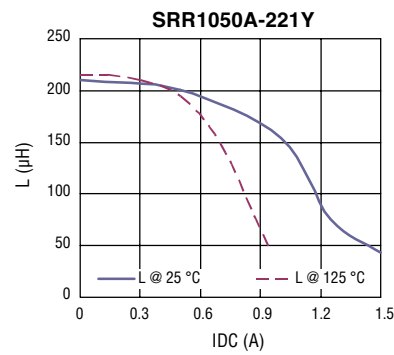
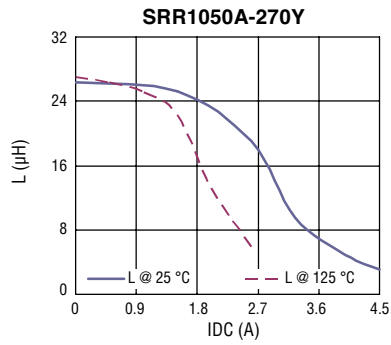
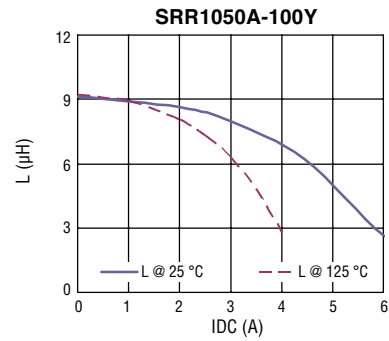
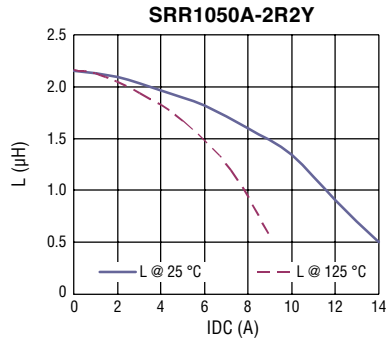


*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 **Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.
 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.

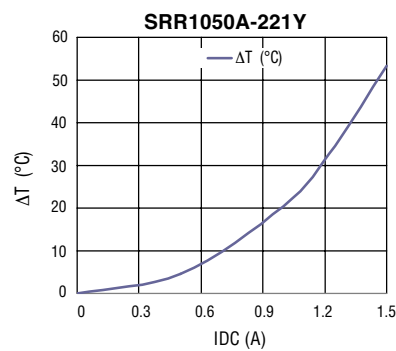
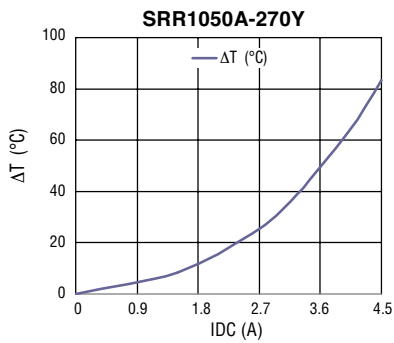
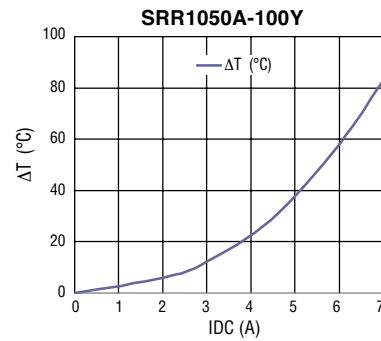
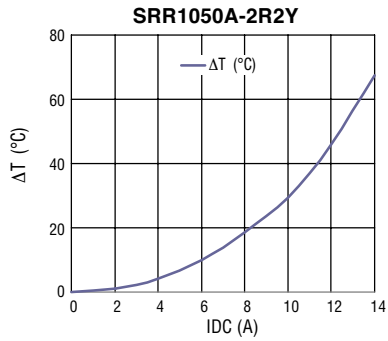
SRR1050A Series - Shielded Power Inductors

BOURNS®

Inductance vs. IDC



Temperature vs. IDC

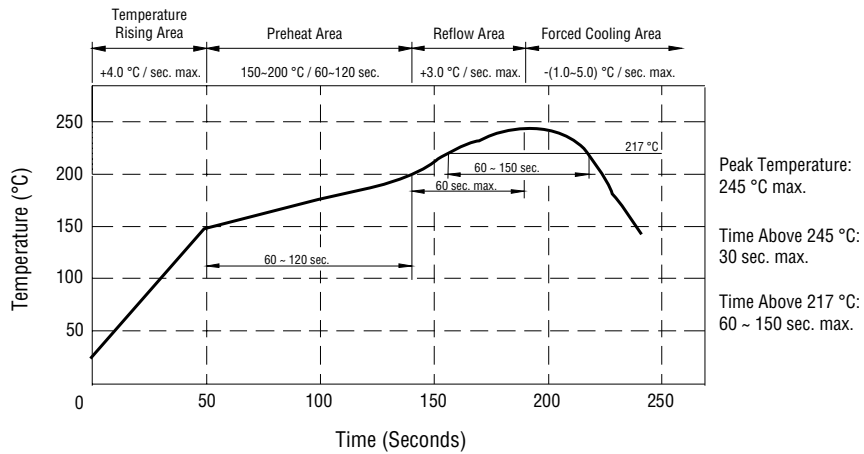


Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

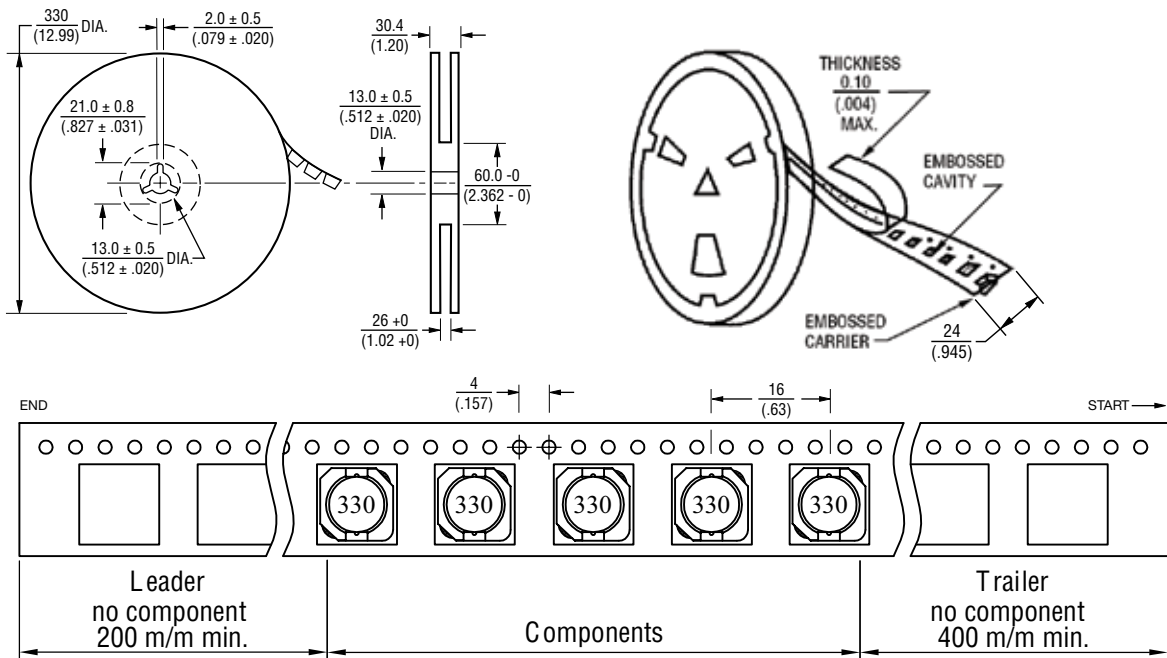
SRR1050A Series - Shielded Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



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

USER DIRECTION OF FEED →

QTY: 700 PCS. PER REEL

07/16

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.