Features

- Multiple applications: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 0.47 to 4000 μH
- Rated current up to 17.9 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

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

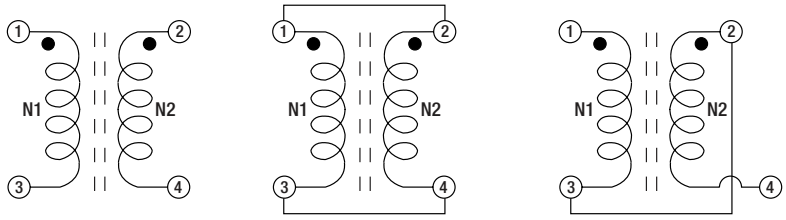
BOURNS®

SRF1280A Series - Dual-Winding Shielded Power Inductors

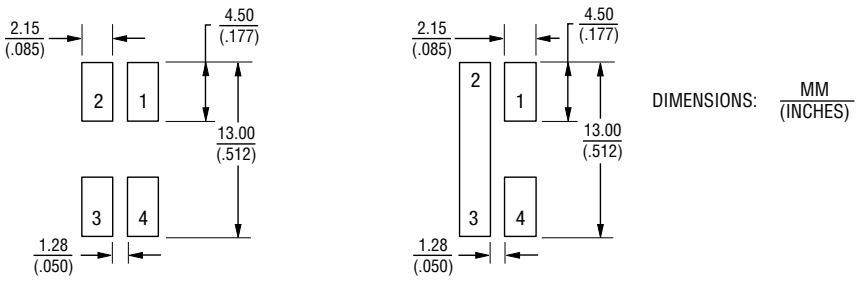
Electrical Specifications @ 25 °C

Bourns Part No.	Parallel Rating					Series Rating				
	Inductance @ 100 KHz L (μH)	Tol. (%)	DCR (Ω) Max.	Irms (A)	Isat (A)	Inductance @ 100 KHz L (μH)	Tol. (%)	DCR (Ω) Max.	Irms (A)	Isat (A)
SRF1280A-R47Y	0.47	± 30	0.0055	17.9	56	1.88	± 30	0.0216	8.94	28
SRF1280A-1R0Y	1.0	± 30	0.0067	15.5	40	4	± 30	0.026	7.74	20
SRF1280A-1R5Y	1.5	± 30	0.0076	13.5	31.1	6	± 30	0.0306	6.77	15.6
SRF1280A-2R2Y	2.2	± 30	0.0092	12.5	25.5	8.8	± 30	0.0338	6.23	12.7
SRF1280A-3R3Y	3.3	± 30	0.011	10.4	21.5	13.2	± 30	0.04	5.23	10.8
SRF1280A-4R7Y	4.7	± 30	0.0135	8.25	16.5	18.8	± 30	0.05	4.13	8.24
SRF1280A-6R8Y	6.8	± 30	0.0183	7.34	13.3	27.2	± 30	0.0656	3.67	6.67
SRF1280A-8R2Y	8.2	± 30	0.0191	6.32	12.2	32.8	± 30	0.0714	3.16	6.09
SRF1280A-100M	10	± 20	0.0241	6.04	11.2	40	± 20	0.0921	3.02	5.6
SRF1280A-150M	15	± 20	0.0333	5.03	9.66	60	± 20	0.129	2.51	4.83
SRF1280A-220M	22	± 20	0.0503	4	7.57	88	± 20	0.192	2	3.78
SRF1280A-330M	33	± 20	0.0664	3.23	6.22	132	± 20	0.265	1.61	3.11
SRF1280A-470M	47	± 20	0.0898	2.95	5.28	188	± 20	0.353	1.47	2.64
SRF1280A-680M	68	± 20	0.123	2.44	4.44	272	± 20	0.469	1.22	2.22
SRF1280A-820M	82	± 20	0.153	2.09	4.06	328	± 20	0.578	1.04	2.03
SRF1280A-101M	100	± 20	0.175	1.96	3.64	400	± 20	0.701	0.98	1.82
SRF1280A-151M	150	± 20	0.261	1.59	3.01	600	± 20	1.013	0.796	1.51
SRF1280A-221M	220	± 20	0.343	1.29	2.43	880	± 20	1.38	0.645	1.22
SRF1280A-331M	330	± 20	0.54	1.04	2.01	1320	± 20	2.172	0.522	1.01
SRF1280A-471M	470	± 20	0.865	0.85	1.68	1880	± 20	3.3	0.427	0.838
SRF1280A-681M	680	± 20	1.296	0.76	1.39	2720	± 20	4.888	0.38	0.697
SRF1280A-821M	820	± 20	1.632	0.65	1.27	3280	± 20	5.896	0.325	0.633
SRF1280A-102M	1000	± 20	1.992	0.61	1.14	4000	± 20	7.202	0.307	0.571

Electrical Schematic



Recommended Layout



* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
** Bourns follows the prevailing definition of "halogen free" in the industry. 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.

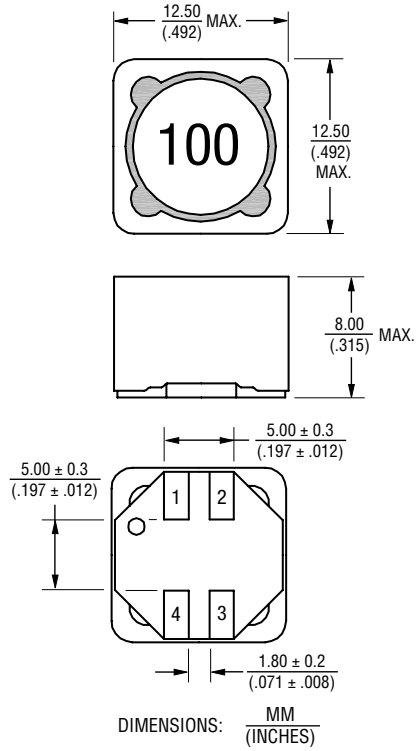
General Specifications

Test Voltage.....0.25 V
Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature
.....-40 °C to +125 °C
Resistance to Solder Heat
.....+245 °C for 10 sec.
Temperature Rise
.....40 °C typ. at rated Irms
Inductance drop.....30 % at Isat

Materials

Core.....Ferrite
Wire.....Enameled copper
Terminal Finish.....Sn
Packaging.....400 pcs. per reel

Product Dimensions

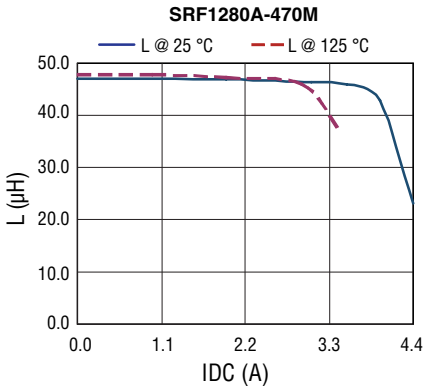


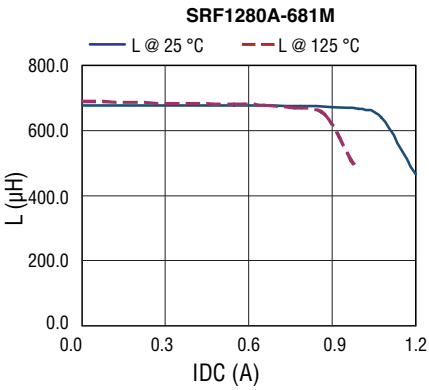
How to Order

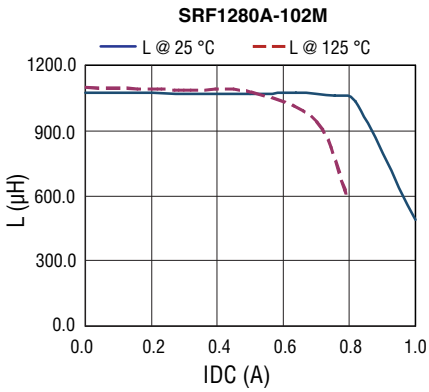
SRF1280A - 100M

Model
Value Code (see table)

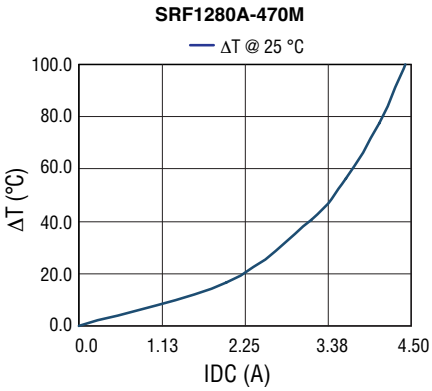
Inductance vs. IDC

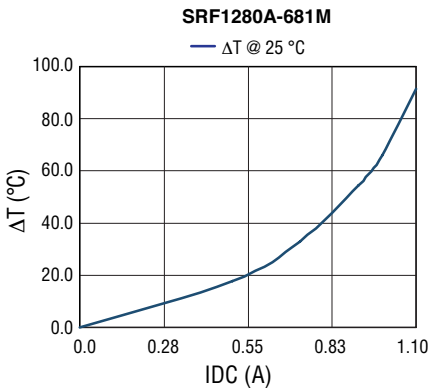


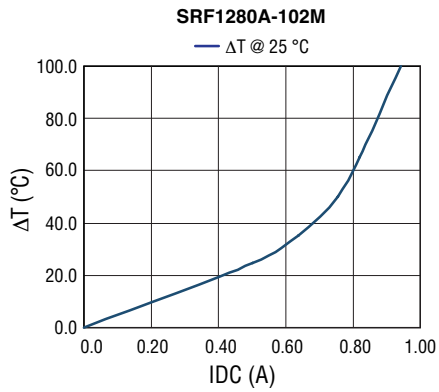




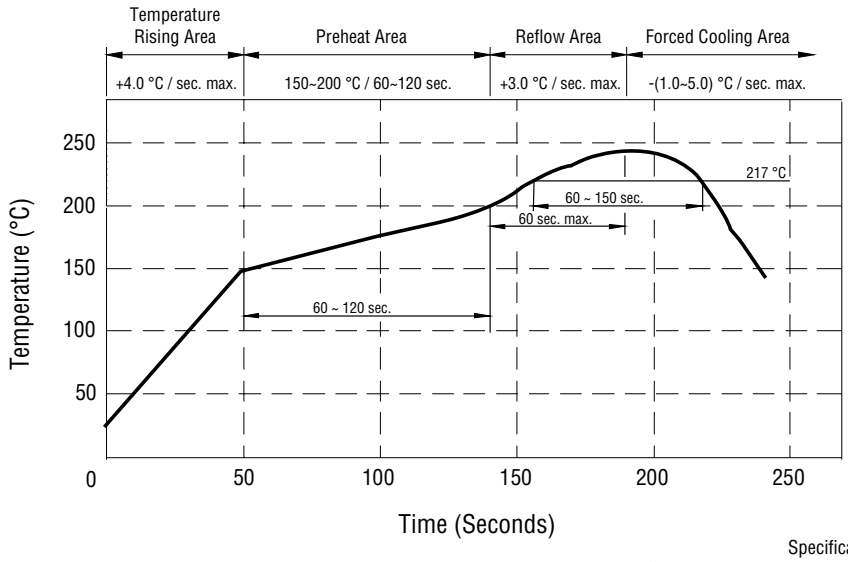
Temperature Rise vs. IDC







Soldering Profile

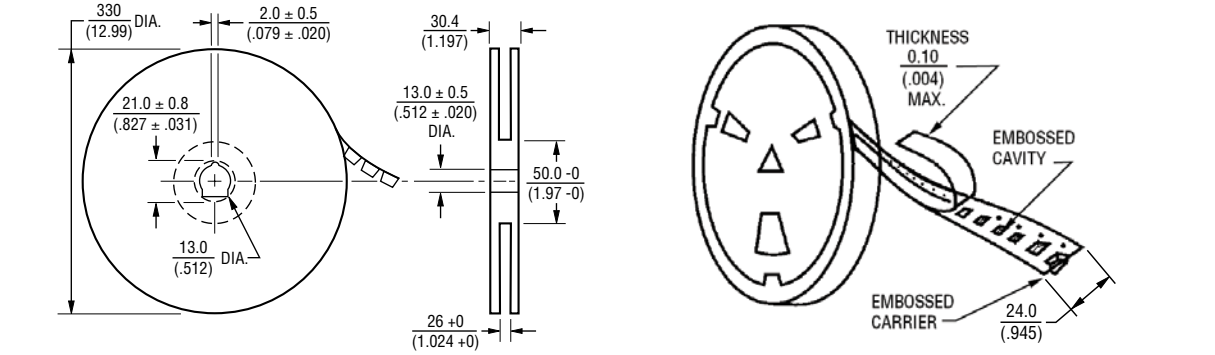


Peak Temperature:
245 °C max.

Time Above 245 °C:
30 sec. max.

Time Above 217 °C:
60 ~ 150 sec. max.

Packaging Specifications



USER DIRECTION OF FEED

QTY: 400 PCS. PER REEL

DIMENSIONS: MM / (INCHES)