



## Features

- Multiple applications: parallel, series, dual-inductor and transformer
- Magnetically shielded, low radiation
- Inductance range: 0.47 to 4000  $\mu$ H
- Rated current up to 17.9 A
- RoHS compliant\*

## Applications

- SEPIC topology
- Power supplies for:
  - Communication equipment
  - Notebooks, desktop computers, servers
  - LCDs, flat panels, backlights
  - Camcorders, HDTVs, car audio systems

# SRF1280 Series - Dual-Winding Shielded Power Inductors

### Electrical Specifications @ 25 °C

Bourns Part No.	Parallel Rating					Series Rating				
	Inductance @ 100 KHz L ( $\mu$ H)	Tol. (%)	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)	Inductance @ 100 KHz L ( $\mu$ H)	Tol. (%)	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	I <sub>sat</sub> (A)
SRF1280-R47Y	0.47	±30	0.0055	17.9	56	1.88	±30	0.0216	8.94	28
SRF1280-1R0Y	1.0	±30	0.0067	15.5	40	4	±30	0.026	7.74	20
SRF1280-1R5Y	1.5	±30	0.0076	13.5	31.1	6	±30	0.0306	6.77	15.6
SRF1280-2R2Y	2.2	±30	0.0092	12.5	25.5	8.8	±30	0.0338	6.23	12.7
SRF1280-3R3Y	3.3	±30	0.011	10.4	21.5	13.2	±30	0.04	5.23	10.8
SRF1280-4R7Y	4.7	±30	0.0135	8.25	16.5	18.8	±30	0.05	4.13	8.24
SRF1280-6R8Y	6.8	±30	0.0183	7.34	13.3	27.2	±30	0.0656	3.67	6.67
SRF1280-8R2Y	8.2	±30	0.0191	6.32	12.2	32.8	±30	0.0714	3.16	6.09
SRF1280-100M	10	±20	0.0241	6.04	11.2	40	±20	0.0921	3.02	5.6
SRF1280-150M	15	±20	0.0333	5.03	9.66	60	±20	0.129	2.51	4.83
SRF1280-220M	22	±20	0.0503	4	7.57	88	±20	0.192	2	3.78
SRF1280-330M	33	±20	0.0664	3.23	6.22	132	±20	0.265	1.61	3.11
SRF1280-470M	47	±20	0.0898	2.95	5.28	188	±20	0.353	1.47	2.64
SRF1280-680M	68	±20	0.123	2.44	4.44	272	±20	0.469	1.22	2.22
SRF1280-820M	82	±20	0.153	2.09	4.06	328	±20	0.578	1.04	2.03
SRF1280-101M	100	±20	0.175	1.96	3.64	400	±20	0.701	0.98	1.82
SRF1280-151M	150	±20	0.261	1.59	3.01	600	±20	1.013	0.796	1.51
SRF1280-221M	220	±20	0.343	1.29	2.43	880	±20	1.38	0.645	1.22
SRF1280-331M	330	±20	0.54	1.04	2.01	1320	±20	2.172	0.522	1.01
SRF1280-471M	470	±20	0.865	0.85	1.68	1880	±20	3.3	0.427	0.838
SRF1280-681M	680	±20	1.296	0.76	1.39	2720	±20	4.888	0.38	0.697
SRF1280-821M	820	±20	1.632	0.65	1.27	3280	±20	5.896	0.325	0.633
SRF1280-102M	1000	±20	1.992	0.61	1.14	4000	±20	7.202	0.307	0.571

### General Specifications

Test Voltage .....0.25 V  
 Hi-pot .....500 Vrms, 3 mA, 3 sec.  
 Reflow Soldering .. 230 °C; 50 sec. max.  
 Operating Temperature  
 .....-40 °C to +105 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Solder Heat  
 .....+260 °C for 10 sec.

### Materials

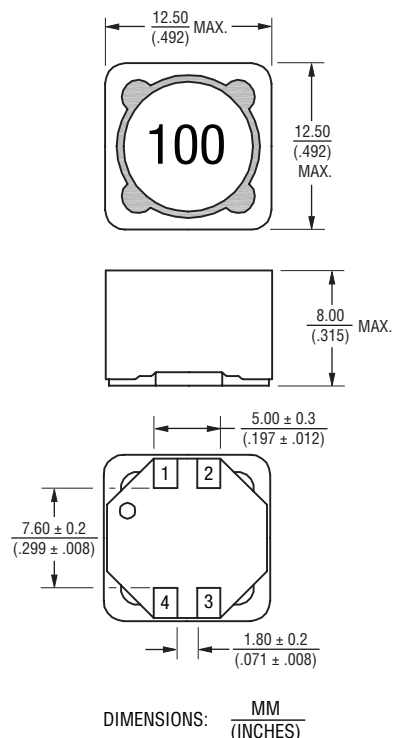
Core .....Ferrite  
 Wire ..... Enameled copper  
 Base ..... LCP  
 Adhesive ..... Epoxy resin  
 Terminal ..... Cu/Ni/Sn  
 Rated Current  
 ..... Inductance drops 30 % at I<sub>sat</sub>  
 Temperature Rise .... 40 °C at rated I<sub>rms</sub>  
 Packaging ..... 400 pcs. per 13-inch reel

### How to Order

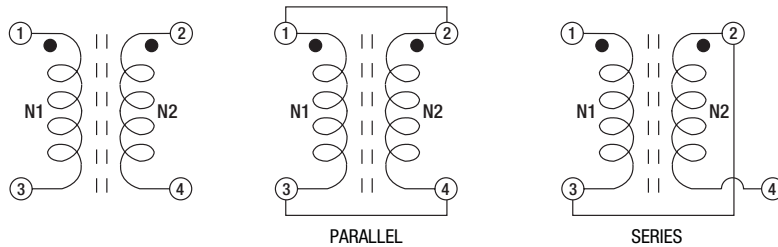
**SRF1280 - 100M**

Model \_\_\_\_\_  
 Value Code (see table) \_\_\_\_\_

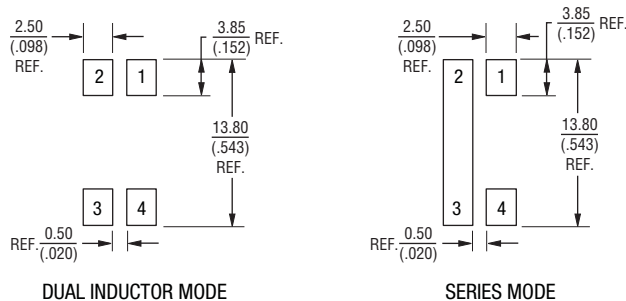
### Product Dimensions



### Electrical Schematic



### Recommended Layout

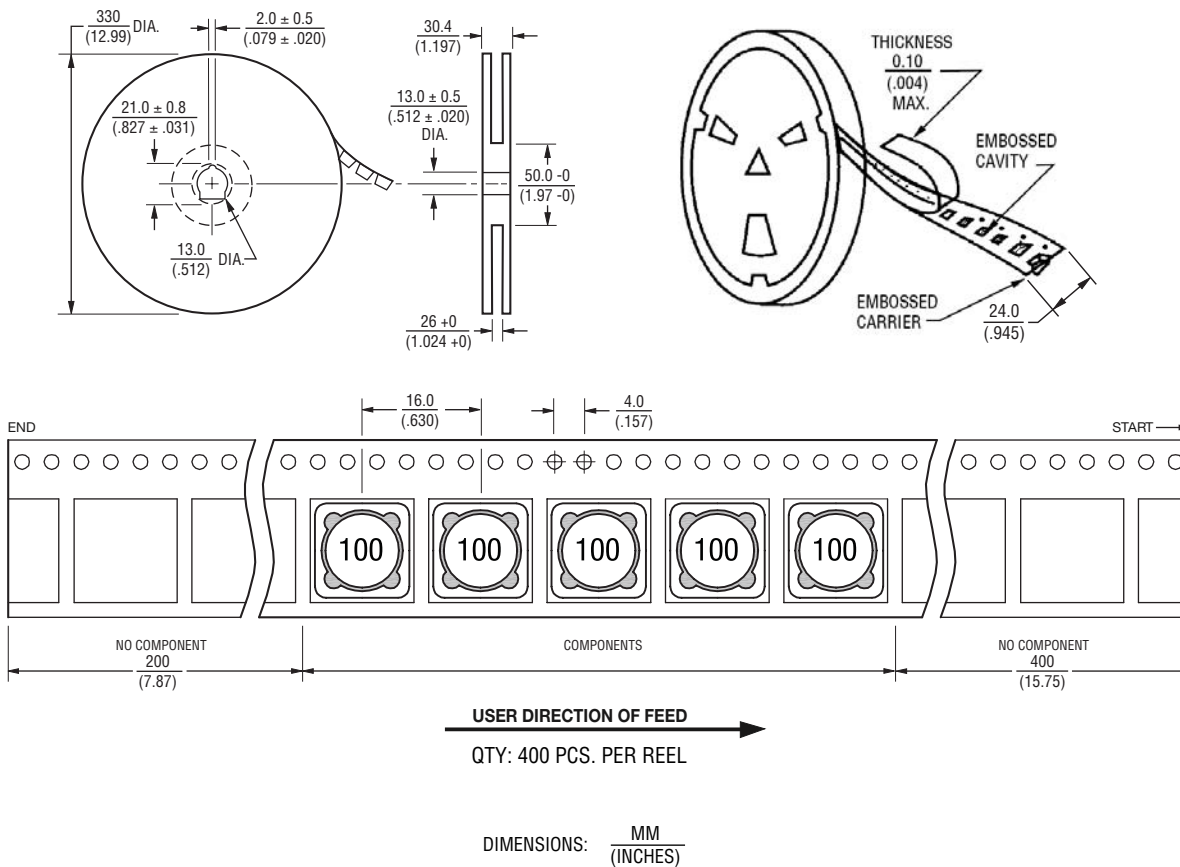


\*RoHS Directive 2002/95/EC Jan 27, 2003 including Annex.  
 Specifications are subject to change without notice.  
 Customers should verify actual device performance in their specific applications.

# SRF1280 Series - Dual-Winding Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116

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](http://www.bourns.com)

REV. 01/11

Specifications are subject to change without notice.  
Customers should verify actual device performance in their specific applications.