

\*RoHS COMPLIANT



**BOURNS®**

### 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

## 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)	Isat (A)	Inductance @ 100 KHz L ( $\mu$ H)	Tol. (%)	DCR ( $\Omega$ ) Max.	I <sub>rms</sub> (A)	Isat (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.  
 Moisture Sensitivity Level ..... 1  
 ESD Classification (HBM) ..... N/A

### Materials

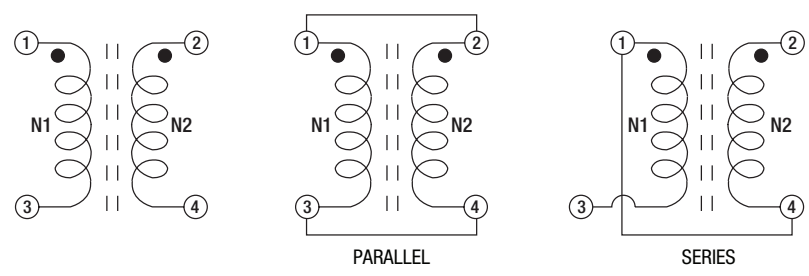
Core ..... Ferrite  
 Wire ..... Enameled copper  
 Base ..... LCP  
 Adhesive ..... Epoxy resin  
 Terminal ..... Sn  
 Rated Current  
 ..... Inductance drops 30 % at Isat  
 Temperature Rise .... 40 °C at rated I<sub>rms</sub>  
 Packaging ..... 400 pcs. per 13-inch reel

### How to Order

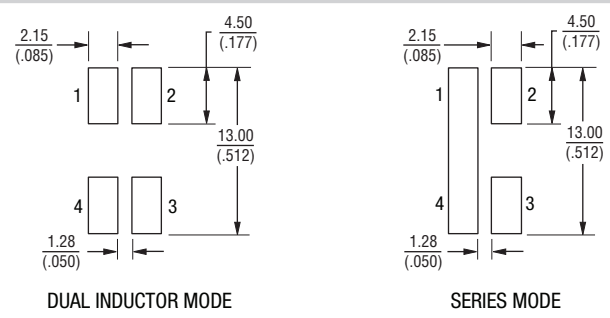
**SRF1280 - 100M**

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

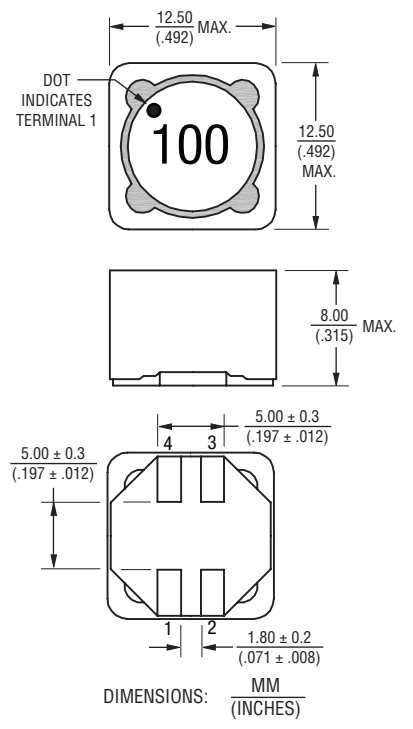
### Electrical Schematic



### Recommended Layout



### Product Dimensions

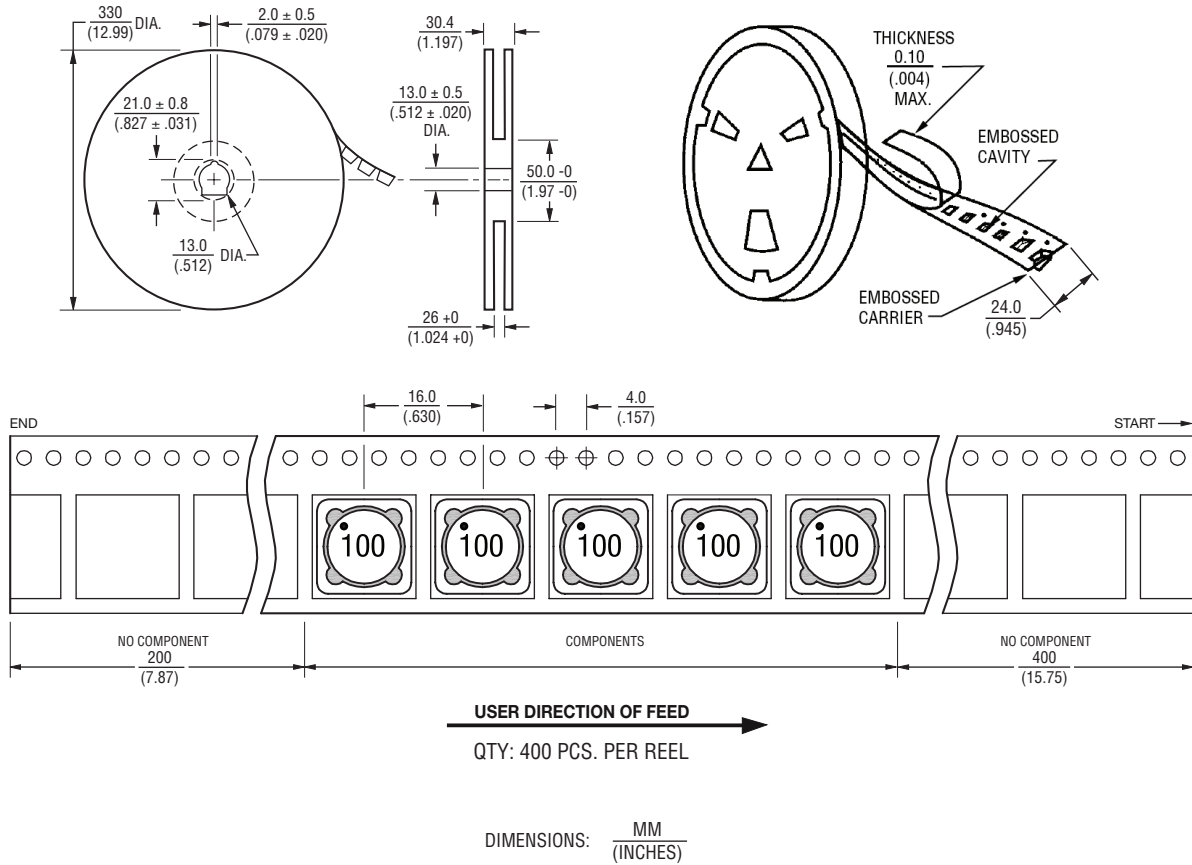


\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

# SRF1280 Series - Dual-Winding Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



**BOURNS®**

Asia-Pacific: Tel: +886-2 2562-4117 • Email: asiacus@bourns.com

EMEA: Tel: +36 88 520 390 • Email: eurocus@bourns.com

The Americas: Tel: +1-951 781-5500 • Email: americus@bourns.com

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

REV. 03/18

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.