

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
- 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

| | Parallel Rating | | | | | Series Rating | | | | |
|--------------|-------------------------|------|------------|------|------|-------------------------|------|------------|-------|-------|
| Bourns | Inductance @ 100 KHz | Tol. | DCR (Ω) | Irms | Isat | Inductance @ 100 KHz | Tol. | DCR (Ω) | Irms | Isat |
| Part No. | L (μH) | (%) | Max. | (A) | (A) | L (μ H) | (%) | Max. | (A) | (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

.....-40 °C to +125 °C (Temperature rise included)

Storage Temperature .. -40 °C to +125 °C Resistance to Solder Heat

.....+260 °C for 10 sec.

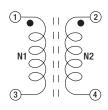
Materials

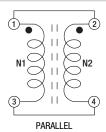
| Core | Ferrite |
|---------------|-----------------|
| Wire | Enameled copper |
| Base | LCP |
| Adhesive | Epoxy resin |
| Terminal | Sn |
| Rated Current | |

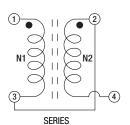
............ Inductance drops 30 % at Isat Temperature Rise40 °C at rated Irms Packaging 400 pcs. per 13-inch reel

How to Order

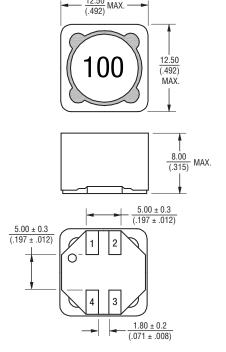
Electrical Schematic



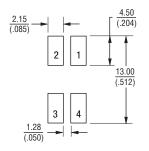




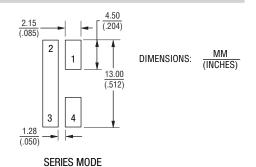
Product Dimensions



Recommended Layout



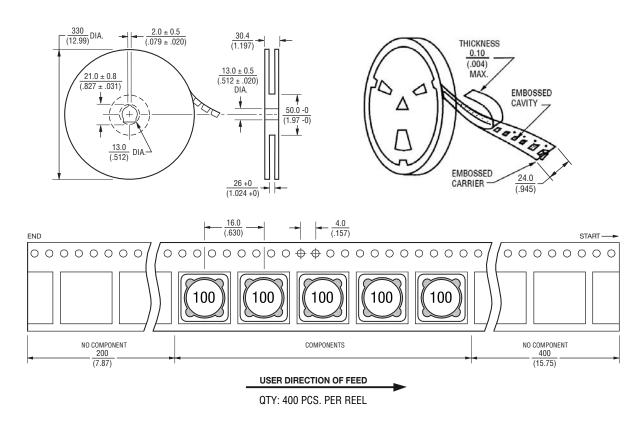
DUAL INDUCTOR MODE



^{*}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.

Packaging Specifications



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

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