



Features

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

Applications

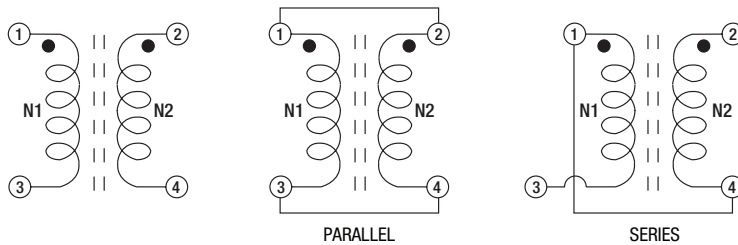
- DC/DC converters
- Power supplies
- SEPIC - DC/DC converters

SRF1280A Series - Dual-Winding Shielded Power Inductors

Electrical Specifications @ 25 °C

| Bourns Part No. | Parallel Rating | | | | | Series Rating | | | | |
|-----------------|-----------------------------------|----------|-----------------------|----------------------|----------|-----------------------------------|----------|-----------------------|----------------------|----------|
| | Inductance @ 100 KHz L (μ H) | Tol. (%) | DCR (Ω) Max. | I _{rms} (A) | Isat (A) | Inductance @ 100 KHz L (μ H) | Tol. (%) | DCR (Ω) Max. | I _{rms} (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



General Specifications

Test Voltage0.25 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 Rise40 °C typ. at rated I_{rms}
 Inductance drop30 % at Isat
 Hi-pot (N1-N2)500 Vac/60 Hz,
 3 mA, 1 sec
 Moisture Sensitivity Level1
 ESD Classification (HBM)N/A

Materials

CoreFerrite
 WireEnameled copper
 Terminal FinishSn
 Packaging400 pcs. per reel

Product Dimensions



WARNING Cancer and Reproductive Harm - www.P65Warnings.ca.gov

* 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.

Users should verify actual device performance in their specific applications.

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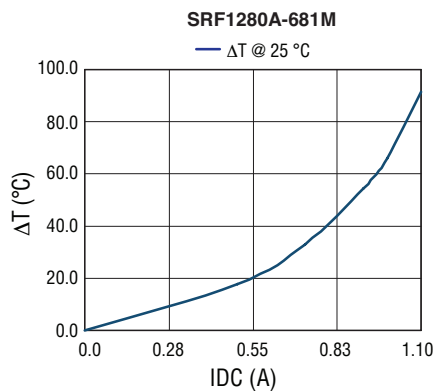
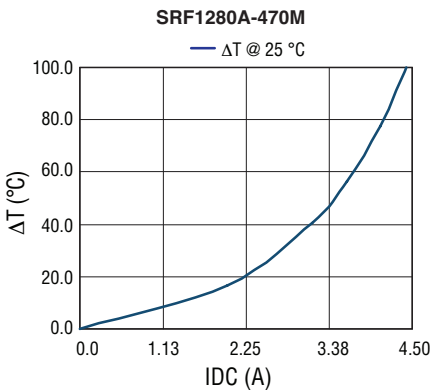
SRF1280A Series - Dual-Winding Shielded Power Inductors



Inductance vs. IDC



Temperature Rise vs. IDC



Soldering Profile



How to Order

SRF1280A - 100M

Model _____

Value Code (see table) _____

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Packaging Specifications



REV. 11/18

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- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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