



## 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 17.6 A
- RoHS compliant\*

## Applications

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

## SRF1260 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) |
| SRF1260-R47Y    | 0.47                              | ±30      | 0.0053                | 17.6                 | 33                   | 1.88                              | ±30      | 0.0212                | 8.8                  | 16.5                 |
| SRF1260-1R0Y    | 1.0                               | ±30      | 0.0062                | 15                   | 23.6                 | 4                                 | ±30      | 0.026                 | 7.51                 | 11.8                 |
| SRF1260-1R5Y    | 1.5                               | ±30      | 0.0073                | 13.8                 | 18.3                 | 6                                 | ±30      | 0.0302                | 6.89                 | 9.15                 |
| SRF1260-2R2Y    | 2.2                               | ±30      | 0.0085                | 10.9                 | 15                   | 8.8                               | ±30      | 0.0333                | 5.46                 | 7.5                  |
| SRF1260-3R3Y    | 3.3                               | ±30      | 0.0101                | 9.26                 | 12.7                 | 13.2                              | ±30      | 0.0372                | 4.63                 | 6.35                 |
| SRF1260-4R7Y    | 4.7                               | ±30      | 0.0137                | 7.18                 | 9.71                 | 18.8                              | ±30      | 0.0479                | 3.59                 | 4.86                 |
| SRF1260-6R8Y    | 6.8                               | ±30      | 0.0186                | 6.64                 | 8.68                 | 27.2                              | ±30      | 0.0672                | 3.32                 | 4.34                 |
| SRF1260-8R2Y    | 8.2                               | ±30      | 0.0194                | 5.54                 | 7.86                 | 32.8                              | ±30      | 0.0737                | 2.77                 | 3.93                 |
| SRF1260-100M    | 10                                | ±20      | 0.0246                | 5.35                 | 7.17                 | 40                                | ±20      | 0.0934                | 2.67                 | 3.59                 |
| SRF1260-150M    | 15                                | ±20      | 0.0329                | 4.27                 | 5.69                 | 60                                | ±20      | 0.125                 | 2.13                 | 2.85                 |
| SRF1260-220M    | 22                                | ±20      | 0.0451                | 3.7                  | 4.71                 | 88                                | ±20      | 0.172                 | 1.84                 | 2.36                 |
| SRF1260-330M    | 33                                | ±20      | 0.0618                | 3.28                 | 3.84                 | 132                               | ±20      | 0.256                 | 1.64                 | 1.92                 |
| SRF1260-470M    | 47                                | ±20      | 0.086                 | 2.71                 | 3.24                 | 188                               | ±20      | 0.34                  | 1.35                 | 1.62                 |
| SRF1260-680M    | 68                                | ±20      | 0.117                 | 2.22                 | 2.7                  | 272                               | ±20      | 0.444                 | 1.11                 | 1.35                 |
| SRF1260-820M    | 82                                | ±20      | 0.15                  | 2.05                 | 2.39                 | 328                               | ±20      | 0.568                 | 1.03                 | 1.2                  |
| SRF1260-101M    | 100                               | ±20      | 0.171                 | 1.78                 | 2.2                  | 400                               | ±20      | 0.656                 | 0.892                | 1.1                  |
| SRF1260-151M    | 150                               | ±20      | 0.254                 | 1.48                 | 1.81                 | 600                               | ±20      | 0.972                 | 0.739                | 0.905                |
| SRF1260-221M    | 220                               | ±20      | 0.354                 | 1.19                 | 1.51                 | 880                               | ±20      | 1.416                 | 0.594                | 0.755                |
| SRF1260-331M    | 330                               | ±20      | 0.574                 | 1.06                 | 1.22                 | 1320                              | ±20      | 2.29                  | 0.53                 | 0.61                 |
| SRF1260-471M    | 470                               | ±20      | 0.83                  | 0.87                 | 1.02                 | 1880                              | ±20      | 3.197                 | 0.434                | 0.51                 |
| SRF1260-681M    | 680                               | ±20      | 1.212                 | 0.7                  | 0.85                 | 2720                              | ±20      | 4.635                 | 0.35                 | 0.425                |
| SRF1260-821M    | 820                               | ±20      | 1.46                  | 0.6                  | 0.77                 | 3280                              | ±20      | 5.363                 | 0.301                | 0.385                |
| SRF1260-102M    | 1000                              | ±20      | 1.854                 | 0.57                 | 0.7                  | 4000                              | ±20      | 6.782                 | 0.283                | 0.35                 |

### 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 +125 °C  
 (Temperature rise included)  
 Storage Temperature .. -40 °C to +125 °C  
 Resistance to Solder Heat  
 ..... +260 °C for 10 sec.

### Materials

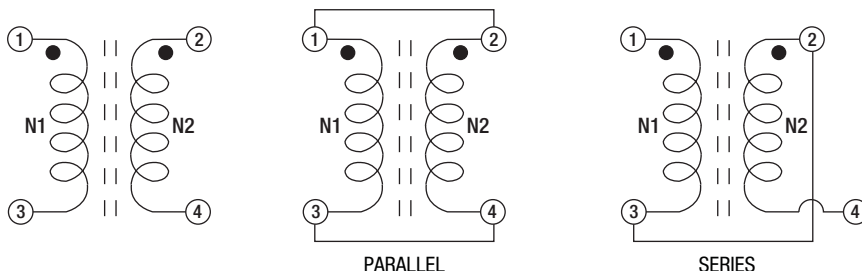
Core.....Ferrite  
 Wire.....Enameled copper  
 Base.....LCP  
 Adhesive.....Epoxy resin  
 Terminal.....Sn  
 Rated Current  
 ..... Inductance drops 30 % at I<sub>sat</sub>  
 Temperature Rise .....40 °C at rated I<sub>rms</sub>  
 Packaging..... 400 pcs. per 13-inch reel

### How to Order

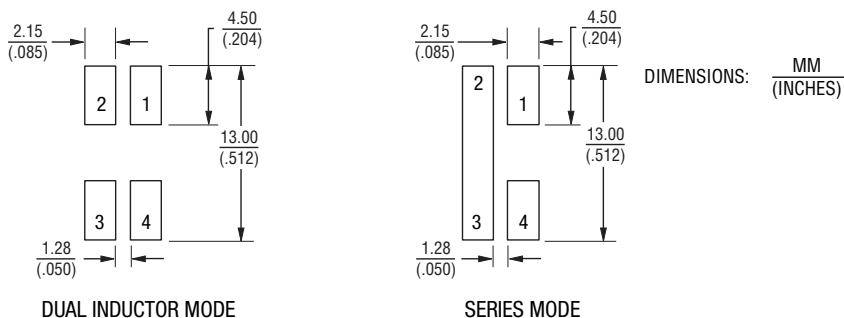
#### SRF1260 - 100M

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

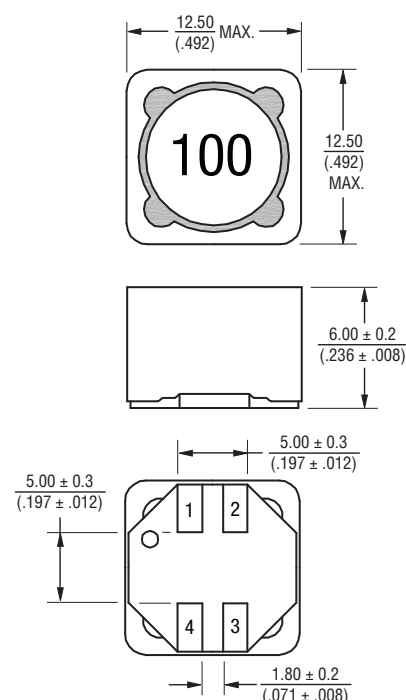
### Electrical Schematic



### Recommended Layout



### Product Dimensions



\*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

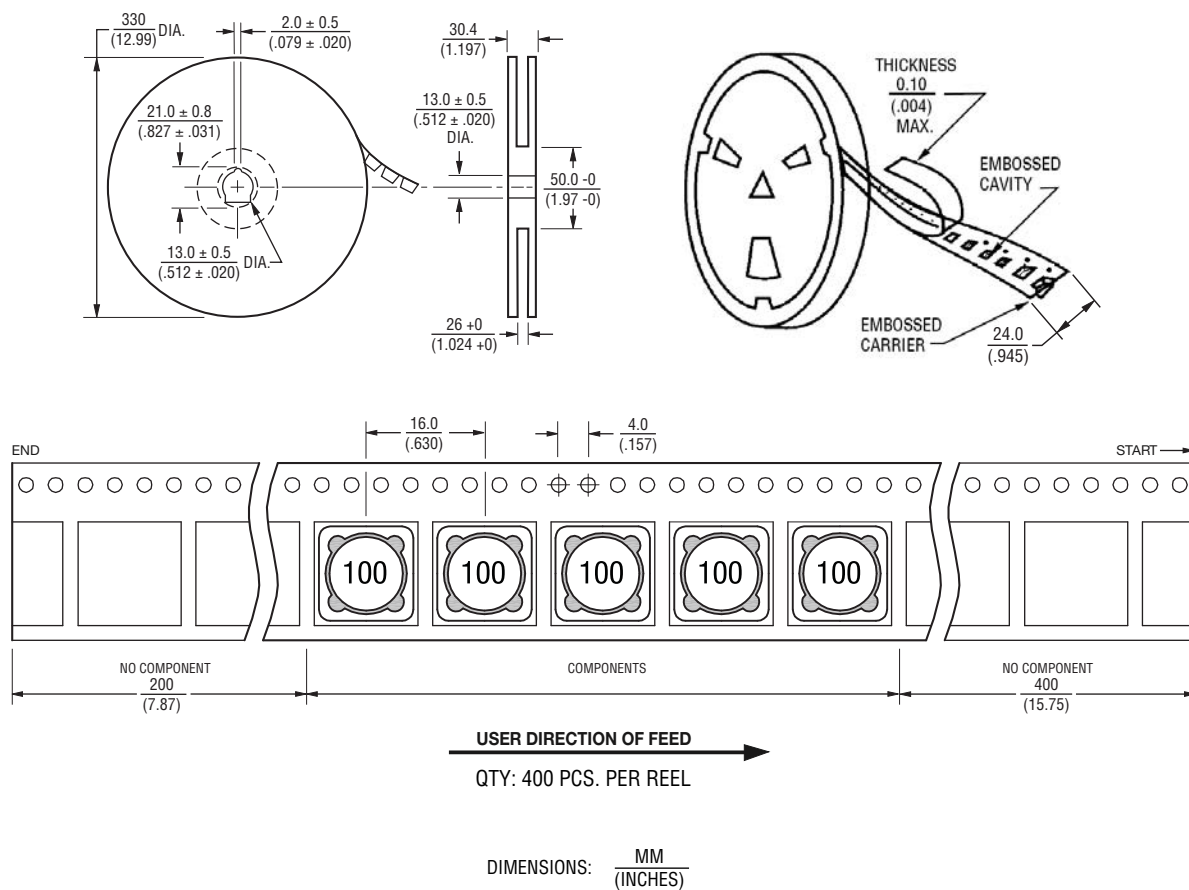
Specifications are subject to change without notice.

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.

# SRF1260 Series - Dual-Winding Shielded Power Inductors

**BOURNS®**

## Packaging Specifications



**BOURNS®**

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REV. 06/13

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