



## Features

- Height of 3.0 mm max.
- Current rating up to 3.1 A
- RoHS compliant\*

## Applications

- Input/output of DC/DC converters
- Power supplies for:
  - Portable communication equipment
  - Camcorders
  - LCD TVs
  - Car radios

# SRR4028 Series - Shielded SMD Power Inductors

## Electrical Specifications

| Bourns Part No. | Inductance 100 kHz |        | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I <sub>rms</sub> (A) | I <sub>sat</sub> (A) |
|-----------------|--------------------|--------|--------|----------------------|----------------|---------------|----------------------|----------------------|
|                 | (μH)               | Tol. % |        |                      |                |               |                      |                      |
| SRR4028-1R2Y    | 1.2                | ±30    | 9.34   | 7.96                 | 176            | 20            | 3.10                 | 2.560                |
| SRR4028-1R8Y    | 1.8                | ±30    | 9.18   | 7.96                 | 146            | 25            | 2.70                 | 2.200                |
| SRR4028-2R2Y    | 2.2                | ±30    | 9.24   | 7.96                 | 111            | 28            | 2.50                 | 2.050                |
| SRR4028-2R7Y    | 2.7                | ±30    | 8.64   | 7.96                 | 92             | 30            | 2.35                 | 1.800                |
| SRR4028-3R3Y    | 3.3                | ±30    | 7.72   | 7.96                 | 76             | 35            | 2.15                 | 1.650                |
| SRR4028-3R9Y    | 3.9                | ±30    | 8.58   | 7.96                 | 56             | 60            | 1.72                 | 1.500                |
| SRR4028-4R7Y    | 4.7                | ±30    | 8.12   | 7.96                 | 55             | 70            | 1.55                 | 1.300                |
| SRR4028-5R6Y    | 5.6                | ±30    | 9.56   | 7.96                 | 69             | 85            | 1.38                 | 1.200                |
| SRR4028-6R8Y    | 6.8                | ±30    | 9.624  | 7.96                 | 77             | 90            | 1.30                 | 1.150                |
| SRR4028-8R2Y    | 8.2                | ±30    | 8.24   | 7.96                 | 45             | 100           | 1.25                 | 1.050                |
| SRR4028-100Y    | 10                 | ±30    | 11.26  | 2.52                 | 34             | 110           | 1.19                 | 1.000                |
| SRR4028-120Y    | 12                 | ±30    | 11.26  | 2.52                 | 25             | 125           | 1.12                 | 0.850                |
| SRR4028-150Y    | 15                 | ±30    | 9.66   | 2.52                 | 27             | 150           | 1.03                 | 0.780                |
| SRR4028-180Y    | 18                 | ±30    | 11.64  | 2.52                 | 25             | 160           | 0.98                 | 0.750                |
| SRR4028-220Y    | 22                 | ±30    | 8.26   | 2.52                 | 23             | 185           | 0.93                 | 0.720                |
| SRR4028-270Y    | 27                 | ±30    | 10.76  | 2.52                 | 18             | 200           | 0.89                 | 0.600                |
| SRR4028-330Y    | 33                 | ±30    | 9.7    | 2.52                 | 16             | 230           | 0.82                 | 0.580                |
| SRR4028-390Y    | 39                 | ±30    | 9.74   | 2.52                 | 14             | 250           | 0.80                 | 0.500                |
| SRR4028-470Y    | 47                 | ±30    | 10.88  | 2.52                 | 13             | 280           | 0.75                 | 0.480                |
| SRR4028-560Y    | 56                 | ±30    | 9      | 2.52                 | 13             | 320           | 0.70                 | 0.410                |
| SRR4028-680Y    | 68                 | ±30    | 8.42   | 2.52                 | 11             | 400           | 0.63                 | 0.360                |
| SRR4028-820Y    | 82                 | ±30    | 8.6    | 2.52                 | 8              | 520           | 0.56                 | 0.320                |
| SRR4028-101Y    | 100                | ±30    | 8.78   | 0.796                | 9              | 600           | 0.51                 | 0.300                |
| SRR4028-121Y    | 120                | ±30    | 13.32  | 0.796                | 8              | 700           | 0.47                 | 0.280                |
| SRR4028-151Y    | 150                | ±30    | 11.72  | 0.796                | 6              | 860           | 0.42                 | 0.260                |
| SRR4028-181Y    | 180                | ±30    | 13.86  | 0.796                | 7              | 1000          | 0.39                 | 0.230                |
| SRR4028-221Y    | 220                | ±30    | 11.3   | 0.796                | 5              | 1250          | 0.34                 | 0.200                |
| SRR4028-271Y    | 270                | ±30    | 17.46  | 0.796                | 5              | 1500          | 0.32                 | 0.180                |
| SRR4028-331Y    | 330                | ±30    | 16.48  | 0.796                | 5              | 1700          | 0.30                 | 0.170                |
| SRR4028-391Y    | 390                | ±30    | 13.18  | 0.796                | 4              | 2200          | 0.26                 | 0.160                |
| SRR4028-471Y    | 470                | ±30    | 13.26  | 0.796                | 3              | 2600          | 0.24                 | 0.155                |
| SRR4028-561Y    | 560                | ±30    | 16.46  | 0.796                | 3              | 3000          | 0.22                 | 0.150                |

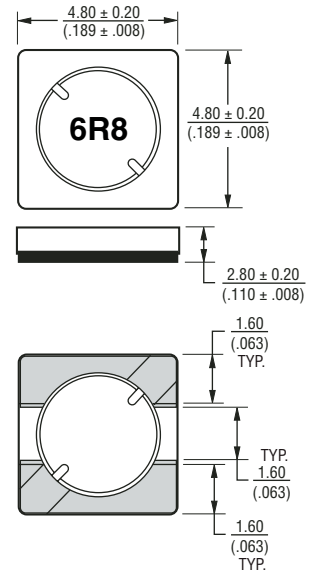
## General Specifications

Test Voltage .....0.1 V, 100 KHz  
 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 Soldering Heat  
 .....260 °C for 10 sec.

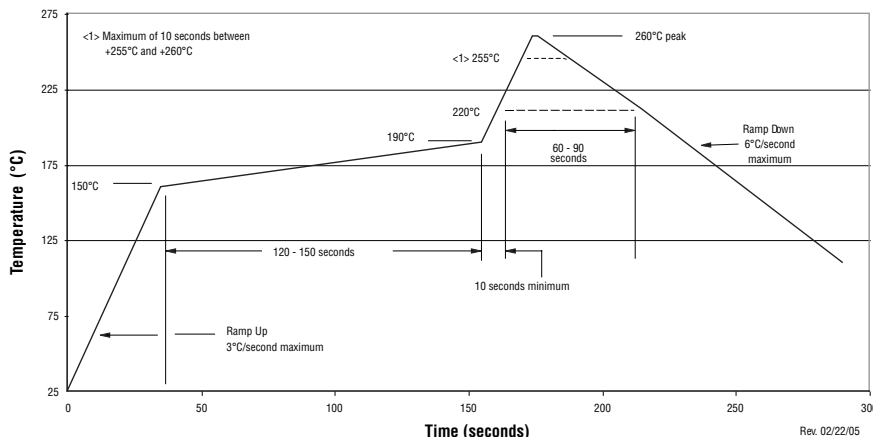
## Materials

Core Material.....Ferrite  
 Wire .....Enamelled Copper  
 Adhesive.....Epoxy Resin  
 Terminal.....Ag/Ni/Sn  
 Rated Current .....Ind. drop of 35 % typ.  
 at I<sub>sat</sub>  
 Temperature Rise .....30 °C typ. at I<sub>rms</sub>  
 Packaging.....500 pcs. per reel

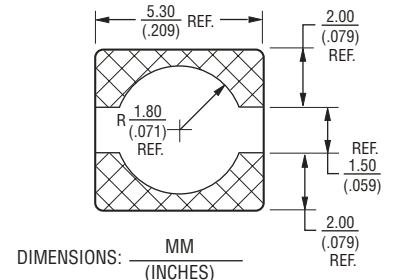
## Product Dimensions



## Soldering Profile



## 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.

