



Features

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

Additional Information

Click these links for more information:



SRR4028 Series - Shielded SMD Power Inductors

Electrical Characteristics

| Bourns Part Number | Inductance 100 kHz | | Q Ref. | Test Frequency (MHz) | SRF Typ. (MHz) | DCR Max. (mΩ) | I rms (A) | I sat (A) |
|--------------------|--------------------|--------|--------|----------------------|----------------|---------------|-----------|-----------|
| | (μH) | Tol. % | | | | | | |
| SRR4028-1R2Y | 1.2 | ±30 | 9.34 | 7.96 | 143.0 | 20 | 3.10 | 2.560 |
| SRR4028-1R8Y | 1.8 | ±30 | 9.18 | 7.96 | 117.0 | 25 | 2.70 | 2.200 |
| SRR4028-2R2Y | 2.2 | ±30 | 9.24 | 7.96 | 90.0 | 28 | 2.50 | 2.050 |
| SRR4028-2R7Y | 2.7 | ±30 | 8.64 | 7.96 | 88.0 | 30 | 2.35 | 1.800 |
| SRR4028-3R3Y | 3.3 | ±30 | 7.72 | 7.96 | 77.0 | 35 | 2.15 | 1.650 |
| SRR4028-3R9Y | 3.9 | ±30 | 8.58 | 7.96 | 79.0 | 60 | 1.72 | 1.500 |
| SRR4028-4R7Y | 4.7 | ±30 | 8.12 | 7.96 | 42.0 | 70 | 1.55 | 1.300 |
| SRR4028-5R6Y | 5.6 | ±30 | 9.56 | 7.96 | 68.0 | 85 | 1.38 | 1.200 |
| SRR4028-6R8Y | 6.8 | ±30 | 9.624 | 7.96 | 58.0 | 90 | 1.30 | 1.150 |
| SRR4028-8R2Y | 8.2 | ±30 | 8.24 | 7.96 | 45.0 | 100 | 1.25 | 1.050 |
| SRR4028-100Y | 10 | ±30 | 11.26 | 2.52 | 30.0 | 110 | 1.19 | 1.000 |
| SRR4028-120Y | 12 | ±30 | 11.26 | 2.52 | 29.0 | 125 | 1.12 | 0.850 |
| SRR4028-150Y | 15 | ±30 | 9.66 | 2.52 | 30.0 | 150 | 1.03 | 0.780 |
| SRR4028-180Y | 18 | ±30 | 11.64 | 2.52 | 27.0 | 160 | 0.98 | 0.750 |
| SRR4028-220Y | 22 | ±30 | 8.26 | 2.52 | 23.0 | 185 | 0.93 | 0.720 |
| SRR4028-270Y | 27 | ±30 | 10.76 | 2.52 | 18.0 | 200 | 0.89 | 0.600 |
| SRR4028-330Y | 33 | ±30 | 9.7 | 2.52 | 16.0 | 230 | 0.82 | 0.580 |
| SRR4028-390Y | 39 | ±30 | 9.74 | 2.52 | 20.0 | 250 | 0.80 | 0.500 |
| SRR4028-470Y | 47 | ±30 | 10.88 | 2.52 | 10.0 | 280 | 0.75 | 0.480 |
| SRR4028-560Y | 56 | ±30 | 9 | 2.52 | 11.0 | 320 | 0.70 | 0.410 |
| SRR4028-680Y | 68 | ±30 | 8.42 | 2.52 | 13.0 | 400 | 0.63 | 0.360 |
| SRR4028-820Y | 82 | ±30 | 8.6 | 2.52 | 9.8 | 520 | 0.56 | 0.320 |
| SRR4028-101Y | 100 | ±30 | 8.78 | 0.796 | 10.0 | 600 | 0.51 | 0.300 |
| SRR4028-121Y | 120 | ±30 | 13.32 | 0.796 | 8.8 | 700 | 0.47 | 0.280 |
| SRR4028-151Y | 150 | ±30 | 11.72 | 0.796 | 6.8 | 860 | 0.42 | 0.260 |
| SRR4028-181Y | 180 | ±30 | 13.86 | 0.796 | 6.7 | 1000 | 0.39 | 0.230 |
| SRR4028-221Y | 220 | ±30 | 11.3 | 0.796 | 6.1 | 1250 | 0.34 | 0.200 |
| SRR4028-271Y | 270 | ±30 | 17.46 | 0.796 | 4.3 | 1500 | 0.32 | 0.180 |
| SRR4028-331Y | 330 | ±30 | 16.48 | 0.796 | 4.3 | 1700 | 0.30 | 0.170 |
| SRR4028-391Y | 390 | ±30 | 13.18 | 0.796 | 3.9 | 2200 | 0.26 | 0.160 |
| SRR4028-471Y | 470 | ±30 | 13.26 | 0.796 | 2.9 | 2600 | 0.24 | 0.155 |
| SRR4028-561Y | 560 | ±30 | 16.46 | 0.796 | 3.0 | 3000 | 0.22 | 0.150 |

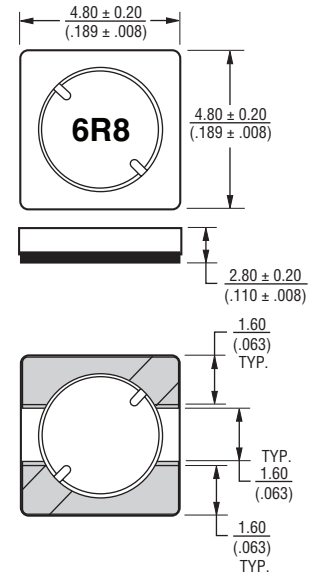
General Specifications

Test Voltage 0.1 V
 Operating Temp. -55 °C to +125 °C
 (Temperature rise included)
 Storage Temperature.. -40 °C to +125 °C
 Moisture Sensitivity Level..... 1
 ESD Classification (HBM)..... N/A

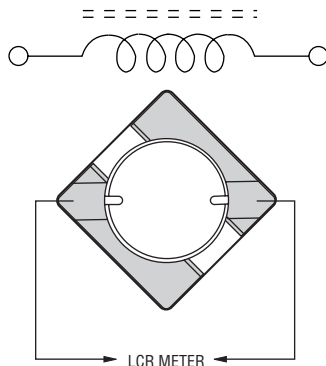
Materials

Core Ferrite
 Wire Enameled copper
 Adhesive..... Epoxy resin
 Terminal Finish SnAgCu
 Rated Current
 Ind. drop 35 % typ. at Isat
 Temperature Rise..... 30 °C typ.
 at rated I rms
 Packaging..... 500 pcs. per reel

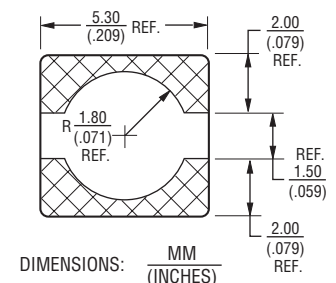
Product Dimensions



Electrical Schematic



Recommended Layout



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant. See www.P65Warnings.ca.gov

*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice.

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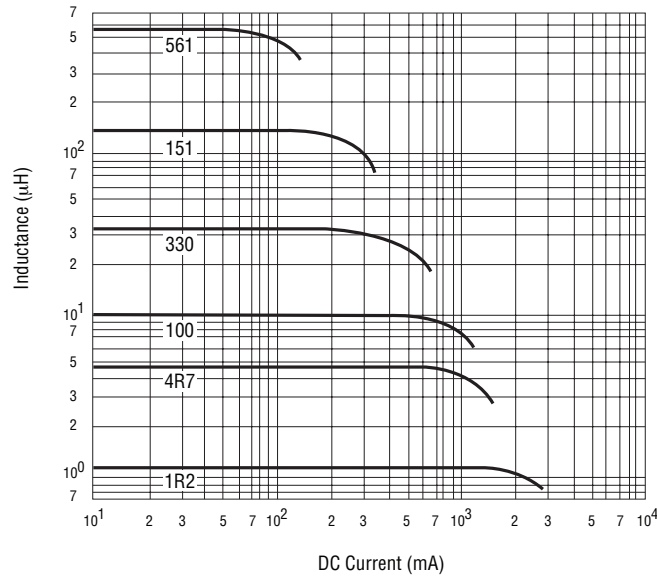
Applications

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

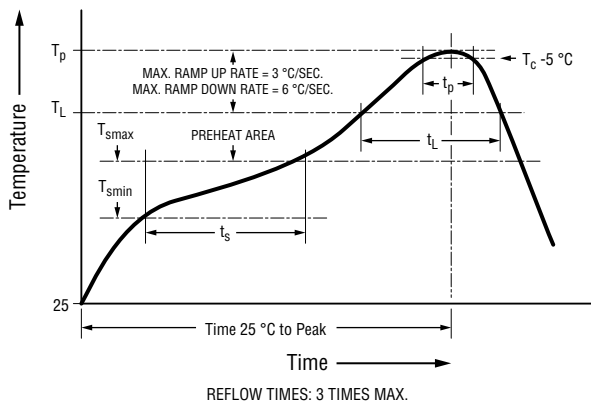
SRR4028 Series - Shielded SMD Power Inductors

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Inductance vs. Current



Soldering Profile



| Profile Feature | Pb Free Assembly |
|---|------------------|
| Preheat | |
| - Temperature Min. (T_{smin}) | 150 °C |
| - Temperature Max. (T_{smax}) | 200 °C |
| - Time (t_p) from T_{smin} to T_{smax} | 60-120 seconds |
| Ramp-up Rate (T_L to T_p) | 3 °C/second max. |
| Liquidous temperature (T_L) | 217 °C |
| Time (t_L) maintained above T_L | 60-150 seconds |
| Peak package body temperature (T_p) | 250 °C |
| Time (t_p) at $T_c - 5$ °C (T_p should be equal to or less than T_c) | < 30 seconds |
| Ramp-Down Rate (T_p to T_L) | 6 °C/second max. |
| Time 25 °C to Peak Temperature | 8 minutes max. |

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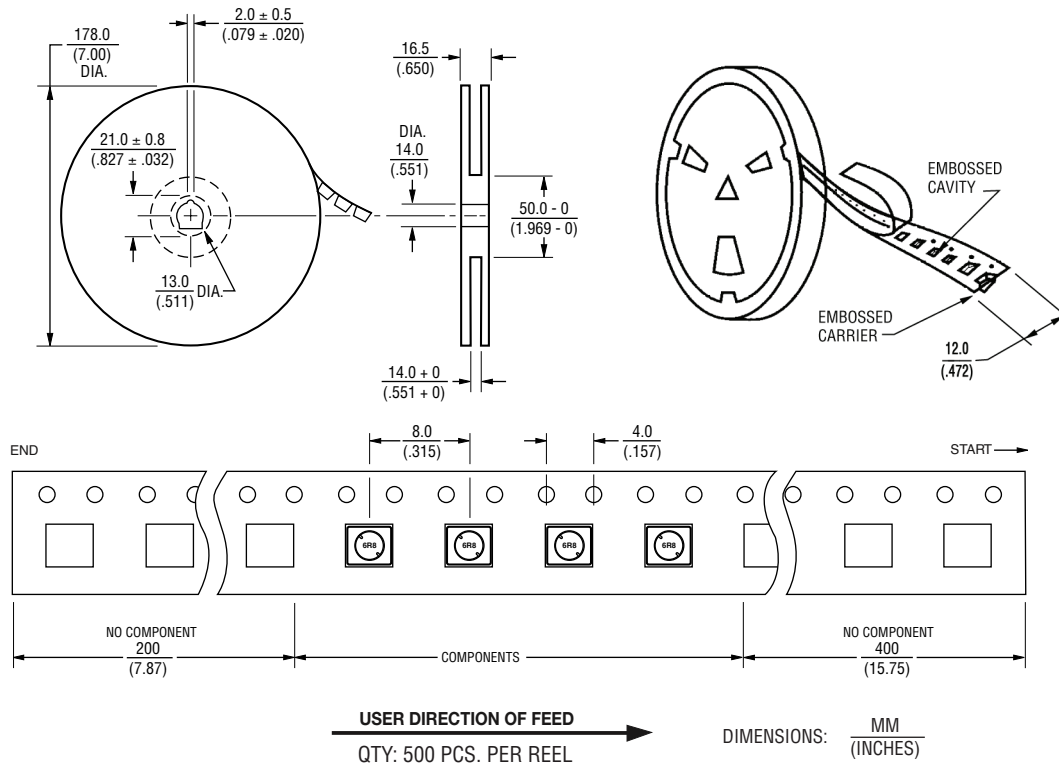
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SRR4028 Series - Shielded SMD Power Inductors

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Packaging Specifications



REV. 12/25

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