

Features

- Shielded construction for low radiation
- U-clip terminal for enhanced mounting strength
- Wide operating temperature range
- AEC-Q200 compliant
- RoHS compliant* and halogen free**

SRR1050HA Series - Shielded Power Inductors

Electrical Specifications @ 25 °C

| | Inductance @ 100 kHz / 0.1 V | | SRF (MHz) | DCR (mΩ) | | Irms (A) | Isat (A) |
|-----------------|---------------------------------|--------|--------------|----------|--------|-------------|-------------|
| Bourns Part No. | L (μH) | Tol. % | Typ. | Тур. | Max. | Typ. | Typ. |
| SRR1050HA-R68Y | 0.68 | 30 | 110.0 | 4.5 | 5.5 | 9.50 | 13.5 |
| SRR1050HA-1R2Y | 1.2 | 30 | 85.0 | 5.8 | 7.0 | 8.30 | 10.5 |
| SRR1050HA-2R2Y | 2.2 | 30 | 53.0 | 7.1 | 9.0 | 7.20 | 8.20 |
| SRR1050HA-3R3Y | 3.3 | 30 | 40.0 | 8.6 | 11.0 | 6.50 | 7.80 |
| SRR1050HA-4R2Y | 4.2 | 30 | 29.0 | 10.4 | 14.0 | 6.10 | 6.40 |
| SRR1050HA-6R8Y | 6.8 | 30 | 27.0 | 15.1 | 19.0 | 5.40 | 5.40 |
| SRR1050HA-8R2Y | 8.2 | 30 | 21.0 | 18.1 | 22.0 | 5.00 | 4.85 |
| SRR1050HA-100Y | 10.0 | 30 | 16.5 | 23.0 | 31.0 | 4.50 | 4.45 |
| SRR1050HA-120Y | 12.0 | 30 | 15.0 | 26.0 | 35.0 | 3.80 | 4.00 |
| SRR1050HA-150Y | 15.0 | 30 | 14.0 | 35.0 | 47.0 | 3.40 | 3.60 |
| SRR1050HA-180Y | 18.0 | 30 | 11.0 | 38.0 | 51.0 | 3.10 | 3.20 |
| SRR1050HA-220Y | 22.0 | 30 | 10.5 | 46.0 | 62.0 | 2.90 | 2.95 |
| SRR1050HA-270Y | 27.0 | 30 | 10.0 | 57.0 | 77.0 | 2.60 | 2.70 |
| SRR1050HA-330Y | 33.0 | 30 | 9.0 | 69.0 | 93.0 | 2.50 | 2.40 |
| SRR1050HA-390Y | 39.0 | 30 | 6.8 | 79.0 | 106.0 | 2.25 | 2.30 |
| SRR1050HA-470Y | 47.0 | 30 | 5.9 | 94.0 | 127.0 | 2.00 | 2.00 |
| SRR1050HA-560Y | 56.0 | 30 | 5.5 | 124.0 | 160.0 | 1.90 | 1.90 |
| SRR1050HA-680Y | 68.0 | 30 | 5.0 | 138.0 | 208.0 | 1.60 | 1.65 |
| SRR1050HA-820Y | 82.0 | 30 | 4.5 | 150.0 | 230.0 | 1.45 | 1.50 |
| SRR1050HA-101Y | 100.0 | 30 | 4.2 | 179.0 | 255.0 | 1.35 | 1.35 |
| SRR1050HA-121Y | 120.0 | 30 | 3.8 | 213.0 | 305.0 | 1.18 | 1.28 |
| SRR1050HA-151Y | 150.0 | 30 | 3.6 | 253.0 | 370.0 | 1.10 | 1.12 |
| SRR1050HA-181Y | 180.0 | 30 | 3.4 | 307.0 | 420.0 | 1.00 | 1.04 |
| SRR1050HA-221Y | 220.0 | 30 | 3.0 | 373.0 | 500.0 | 0.94 | 0.94 |
| SRR1050HA-271Y | 270.0 | 30 | 2.4 | 491.0 | 675.0 | 0.80 | 0.84 |
| SRR1050HA-331Y | 330.0 | 30 | 2.0 | 613.0 | 815.0 | 0.73 | 0.75 |
| SRR1050HA-471Y | 470.0 | 30 | 1.8 | 990.0 | 1200.0 | 0.60 | 0.70 |

Additional Information

Click these links for more information:











SELECTOR

TECHNICAL INVENT

<u>AMPLES</u>

CONTAC

General Specifications

Operating Temperature

.....-55 °C to +150 °C (Temperature rise included)

Storage Temperature (Component)

.....-55 °C to +150 °C Temperature Rise ... 40 °C at rated Irms¹

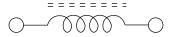
Rated Current

¹ Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

| Core | Ferrite |
|-----------------|--------------------------|
| Wire | Enameled copper |
| Terminal Finish | Ni/Sn |
| Packaging70 | 00 pcs. per 13-inch reel |

Electrical Schematic



How to Order

SRR1050HA - 100Y

Value Code (see table) ——

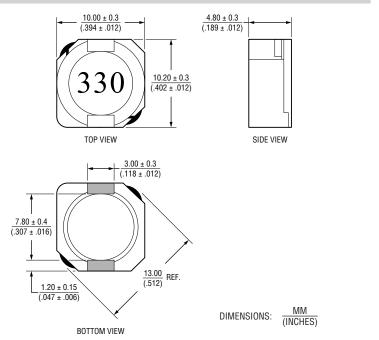


^{*} RoHS Directive 2015/863, Mar 31, 2015 and Annex.

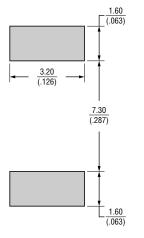
SRR1050HA Series - Shielded Power Inductors

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Product Dimensions



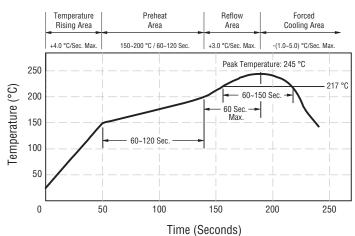
Recommended Layout



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

Soldering Profile

Peak Temperature: 245 °C max. Max. Peak Temperature -5 °C: 30 sec. max. Max. Time Above 217 °C: 60~150 sec. max.

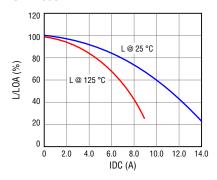


SRR1050HA Series - Shielded Power Inductors

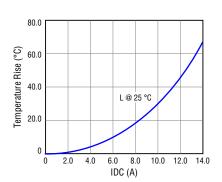
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Inductance vs. IDC

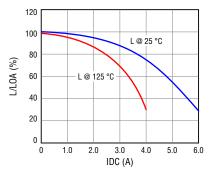
SRR1050HA-2R2Y

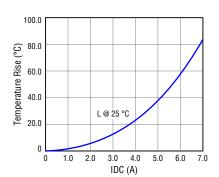


Temperature vs. IDC

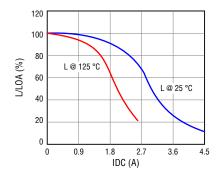


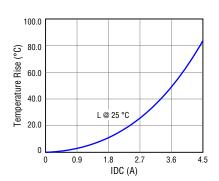
SRR1050HA-100Y



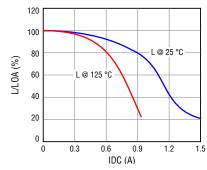


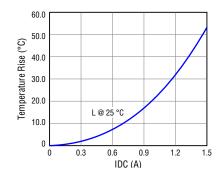
SRR1050HA-270Y





SRR1050HA-221Y



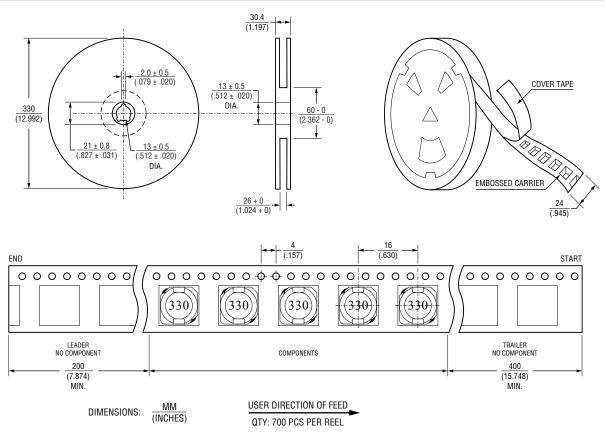


Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.

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Packaging Specifications



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