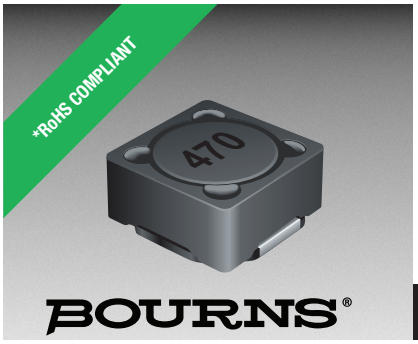


Features

- Available in E12 values
- Inductance range as low as 1.1 µH
- Current rating to 10.2 amps
- RoHS compliant*

Applications

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

SRR1280 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance		Q (Typ.)	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
	(µH)	Tol. (%)							
SRR1280-1R1Y	1.1	± 30	26	7.96	85	6.5	10.20	14.00	94
SRR1280-1R2Y	1.2	± 30	28	7.96	83	7.0	9.80	10.50	90
SRR1280-1R4Y	1.4	± 30	24	7.96	80	9.8	9.80	12.00	90
SRR1280-2R4Y	2.4	± 30	20	7.96	45	10.0	9.20	10.50	62
SRR1280-3R3Y	3.3	± 30	20	7.96	40	12.0	8.80	9.80	54
SRR1280-3R5Y	3.5	± 30	20	7.96	36	12.0	8.80	9.80	56
SRR1280-4R5Y	4.5	± 30	20	7.96	34	13.5	8.50	9.00	48
SRR1280-4R7Y	4.7	± 30	22	7.96	30	15.5	8.20	8.80	48
SRR1280-5R6Y	5.6	± 30	20	7.96	24	16.0	8.00	8.50	44
SRR1280-6R1Y	6.1	± 30	20	7.96	23	18.0	6.60	7.80	43
SRR1280-6R8Y	6.8	± 30	20	7.96	22	18.5	7.60	8.00	39
SRR1280-7R5Y	7.5	± 30	16	7.96	21	17.5	6.40	7.00	37
SRR1280-7R6Y	7.6	± 30	15	7.96	21	20.0	5.90	6.50	35
SRR1280-8R2Y	8.2	± 30	22	2.52	20	20.5	6.20	6.80	35
SRR1280-100M	10.0	± 20	24	2.52	17	19.5	6.00	6.60	32
SRR1280-120M	12.0	± 20	26	2.52	15	28.0	5.60	6.30	30
SRR1280-150M	15.0	± 20	26	2.52	13	28.5	5.20	5.00	28
SRR1280-180M	18.0	± 20	24	2.52	12	35.0	4.80	4.60	23
SRR1280-220M	22.0	± 20	20	2.52	11	38.6	4.30	4.10	21
SRR1280-270M	27.0	± 20	26	2.52	10	52.0	3.90	3.70	20
SRR1280-330M	33.0	± 20	28	2.52	9.5	57.0	3.50	3.30	17
SRR1280-390M	39.0	± 20	24	2.52	8.5	70.0	3.20	3.10	16
SRR1280-470M	47.0	± 20	24	2.52	7.5	80.0	2.90	2.80	15
SRR1280-560M	56.0	± 20	24	2.52	7.0	100.0	2.60	2.50	13
SRR1280-680M	68.0	± 20	20	2.52	6.5	120.0	2.40	2.30	12
SRR1280-820M	82.0	± 20	20	0.796	5.0	130.0	2.30	2.20	11
SRR1280-101M	100.0	± 20	18	0.796	4.5	150.0	2.10	2.00	10
SRR1280-121K	120.0	± 10	16	0.796	4.3	200.0	1.95	1.95	9
SRR1280-151K	150.0	± 10	24	0.796	4.1	270.0	1.85	1.90	8
SRR1280-181K	180.0	± 10	24	0.796	4.0	300.0	1.75	1.88	7
SRR1280-221K	220.0	± 10	24	0.796	3.4	400.0	1.60	1.70	7
SRR1280-271K	270.0	± 10	20	0.796	3.1	450.0	1.20	1.60	6
SRR1280-331K	330.0	± 10	18	0.796	2.9	600.0	1.10	1.40	5
SRR1280-391K	390.0	± 10	20	0.796	2.7	680.0	1.00	1.40	5
SRR1280-471K	470.0	± 10	20	0.796	2.2	880.0	0.90	1.25	5
SRR1280-561K	560.0	± 10	20	0.796	2.0	960.0	0.80	1.15	4
SRR1280-681K	680.0	± 10	26	0.796	1.7	1300.0	0.75	0.97	4
SRR1280-821K	820.0	± 10	20	0.796	1.4	1500.0	0.70	0.94	4
SRR1280-102K	1000.0	± 10	40	0.252	1.3	1700.0	0.68	0.80	3

**K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(µH) x Δ I (peak-to-peak ripple current, A), determine core loss from *Core Loss vs. Flux Density* plot.

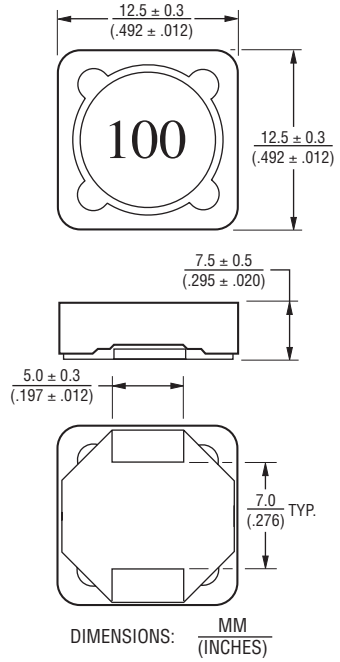
General Specifications

Inductance Test Frequency / Voltage
SRR1280-1R1Y to -8R2Y ... 100 kHz/1 V
SRR1280-100M to -102K..... 1 kHz/1 V
Operating Temperature
.....-40 °C to +125 °C
(Temperature rise included)
Storage Temperature
.....-40 °C to +125 °C
Temperature Rise
.....40 °C typ. at rated I rms
Inductance Drop ..... 25 % typ. at I sat
Moisture Sensitivity Level.....1
ESD Classification (HBM).....N/A

Materials

Core.....Ferrite DR and RI
Wire ..... Enameled copper wire 130
Terminal Finish .....Sn
Packaging..... 400 pcs. per reel

Product Dimensions



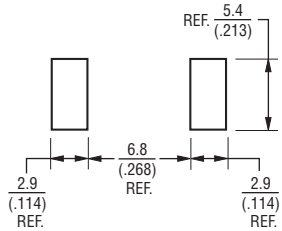
Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

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

Recommended Layout



*RoHS Directive 2015/863, Mar 31, 2015 and Annex. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications.
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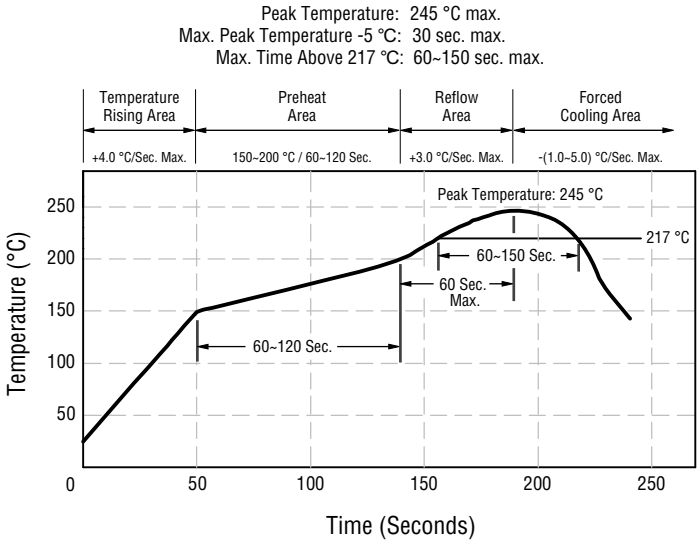
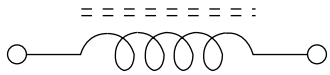
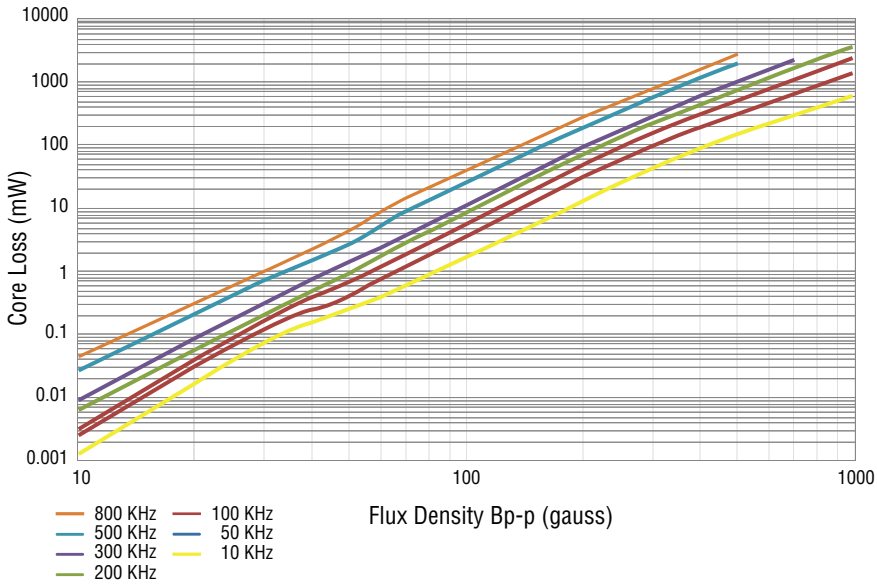
Soldering Profile



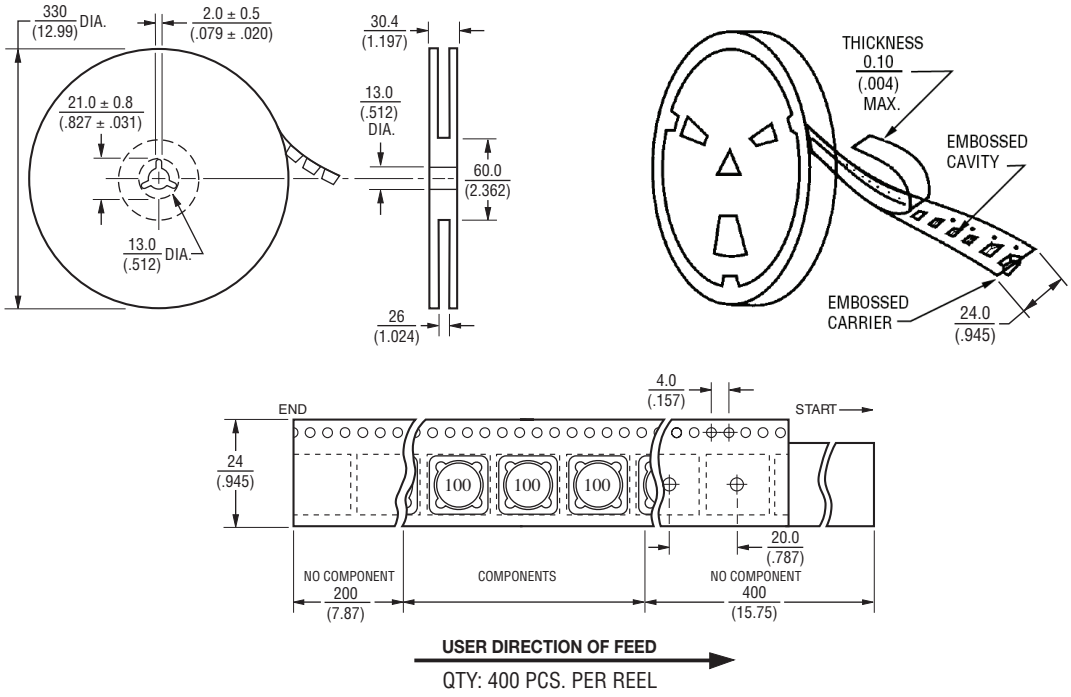
Electrical Schematic



Core Loss vs. Flux Density



Packaging Specifications



REV. 11/25

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