BOURNS®

Features

- Available in E12 values
- Height of 4.5 mm maximum
- Current rating to 9.3 amps
- RoHS compliant*

Applications

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

SRR1240 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part No.	Inductance 100 KHz (µH)	Tol. %	Q Typ.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K-Factor
SRR1240-1R0Y	1.0	± 30	10	7.96	85	7.0	9.30	9.20	160
SRR1240-1R5Y	1.5	± 30	16	7.96	80	9.5	9.20	9.00	131
SRR1240-2R4Y	2.4	± 30	10	7.96	54	11.5	8.00	7.80	111
SRR1240-3R3Y	3.3	± 30	14	7.96	43	15.0	6.80	6.50	96
SRR1240-3R9Y	3.9	± 30	14	7.96	39	15.0	6.35	6.20	96
SRR1240-4R7M	4.7	± 20	16	7.96	33	18.0	6.00	5.60	85
SRR1240-5R6M	5.6	± 20	14	7.96	35	20.0	5.40	5.10	76
SRR1240-6R8M	6.8	± 20	14	7.96	34	23.0	5.20	4.70	69
SRR1240-8R2M	8.2	± 20	10	7.96	32	27.0	4.50	4.30	63
SRR1240-100M	10.0	± 20	17	2.52	27	32.0	4.00	4.00	58
SRR1240-120M	12.0	± 20	16	2.52	25	38.0	3.80	3.60	50
SRR1240-150M	15.0	± 20	16	2.52	22	47.0	3.50	3.20	47
SRR1240-180M	18.0	± 20	14	2.52	20	55.0	3.20	3.00	41
SRR1240-220M	22.0	± 20	18	2.52	16	67.5	3.00	2.60	37
SRR1240-270M	27.0	± 20	16	2.52	15.5	85.0	2.55	2.35	34
SRR1240-330M	33.0	± 20	19	2.52	15	97.0	2.30	2.10	31
SRR1240-390M	39.0	± 20	14	2.52	14	120.0	2.15	2.00	28
SRR1240-470M	47.0	± 20	19	2.52	13	135.0	2.00	1.80	26
SRR1240-560M	56.0	± 20	16	2.52	12	170.0	1.80	1.65	24
SRR1240-680M	68.0	± 20	19	2.52	11	200.0	1.50	1.50	22
SRR1240-820M	82.0	± 20	16	2.52	10	250.0	1.35	1.35	20
SRR1240-101M	100.0	± 20	14	0.796	8	300.0	1.25	1.20	18
SRR1240-121K	120.0	± 10	12	0.796	7.8	370.0	1.20	1.15	16
SRR1240-151K	150.0	± 10	12	0.796	7.5	440.0	1.10	1.05	14
SRR1240-181K	180.0	± 10	12	0.796	7.0	550.0	0.98	0.95	13
SRR1240-221K	220.0	± 10	12	0.796	6.6	660.0	0.92	0.90	12
SRR1240-271K	270.0	± 10	10	0.796	6.0	780.0	0.80	0.80	11
SRR1240-331K	330.0	± 10	12	0.796	5.5	950.0	0.75	0.75	10
SRR1240-391K	390.0	± 10	12	0.796	5.0	1150.0	0.70	0.65	9
SRR1240-471K	470.0	± 10	12	0.796	4.5	1350.0	0.62	0.60	8
SRR1240-561K	560.0	± 10	12	0.796	4.0	1500.0	0.55	0.52	7
SRR1240-681K	680.0	± 10	14	0.796	3.8	2000.0	0.50	0.48	7
SRR1240-821K	820.0	± 10	10	0.796	3.5	2400.0	0.45	0.42	6
SRR1240-102K	1000.0	± 10	16	0.252	2.8	3000.0	0.42	0.40	6

**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.

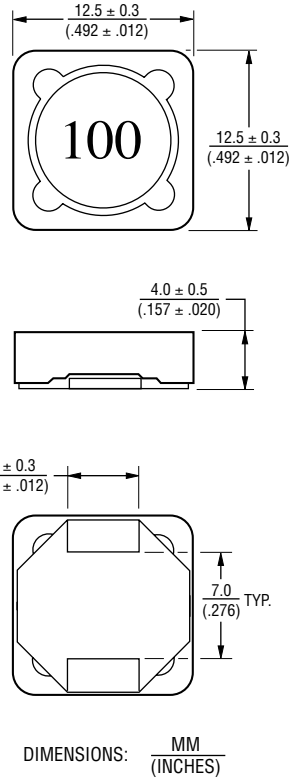
General Specifications

Test Voltage ..... 0.1 V
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

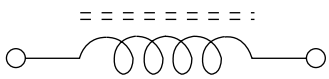
Core ..... Ferrite DR & RI
Wire ..... Enameled copper wire 130
Terminal ..... Cu/Ni/Sn
Rated Current
..... Ind. drop of 25 % typ. at Isat
Temperature Rise
..... 40 °C max. at rated Irms
Packaging ..... 800 pcs. per reel

Product Dimensions

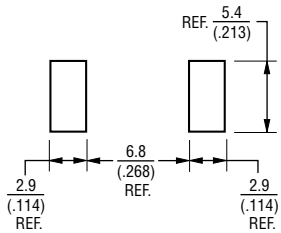


DIMENSIONS: MM / (INCHES)

Electrical Schematic

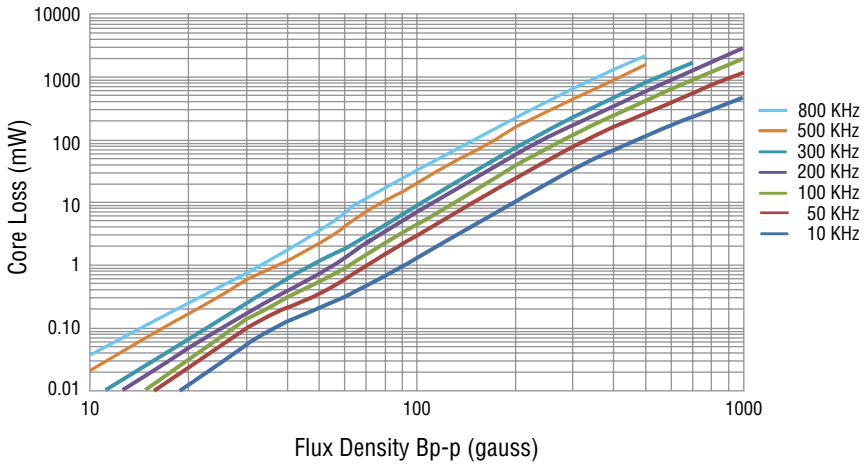


Recommended Layout

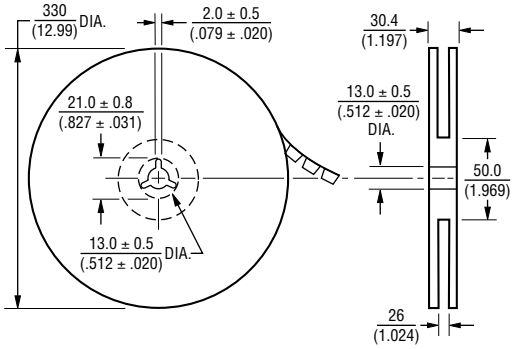


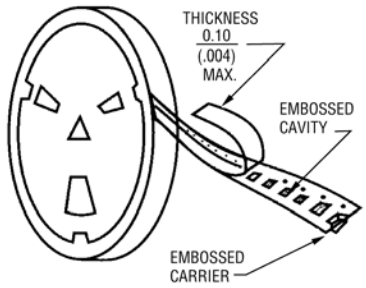
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

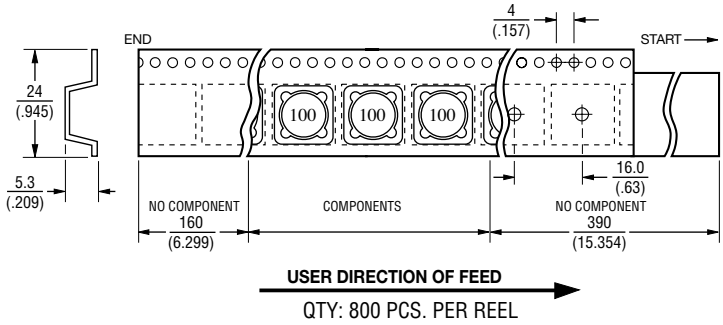
Core Loss vs. Flux Density



Packaging Specifications







USER DIRECTION OF FEED

QTY: 800 PCS. PER REEL

DIMENSIONS: MM / (INCHES)

REV. 03/17