25-07256

Features

- Available in E12 values
- Inductance range as low as 1.0 µH
- Current rating to 9.4 amps
- RoHS compliant*

Applications

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

SRR1260 Series - Shielded SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q (Typ.)	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)
	(µH)	Tol. (%)						
SRR1260-1R0Y	1.0	± 30	26	7.96	100.00	7.8	9.40	10.00
SRR1260-1R2Y	1.2	± 30	18	7.96	91.10	8.0	9.20	9.80
SRR1260-1R5Y	1.5	± 30	24	7.96	86.00	9.5	8.80	9.90
SRR1260-2R2Y	2.2	± 30	22	7.96	70.00	10.5	8.20	8.50
SRR1260-2R4Y	2.4	± 30	18	7.96	63.80	11.5	7.80	8.00
SRR1260-3R3Y	3.3	± 30	20	7.96	40.00	12.0	7.60	7.80
SRR1260-3R5Y	3.5	± 30	22	7.96	37.60	13.0	7.50	7.60
SRR1260-4R7Y	4.7	± 30	19	7.96	36.70	15.5	6.80	7.00
SRR1260-5R6Y	5.6	± 30	19	7.96	33.00	16.2	6.70	6.90
SRR1260-6R1Y	6.1	± 30	21	7.96	29.80	17.0	6.60	6.80
SRR1260-6R8Y	6.8	± 30	20	7.96	28.20	18.0	6.30	6.50
SRR1260-7R6Y	7.6	± 30	16	7.96	27.90	19.0	6.00	6.20
SRR1260-8R2Y	8.2	± 30	18	7.96	24.00	19.5	5.70	5.80
SRR1260-100M	10.0	± 20	32	2.52	21.00	20.0	5.50	5.50
SRR1260-120M	12.0	± 20	27	2.52	19.40	23.0	5.20	5.00
SRR1260-150M	15.0	± 20	25	2.52	17.60	27.0	5.00	4.60
SRR1260-180M	18.0	± 20	28	2.52	15.50	36.0	4.20	3.90
SRR1260-220M	22.0	± 20	29	2.52	13.40	43.0	4.00	3.70
SRR1260-270M	27.0	± 20	26	2.52	12.70	45.0	3.60	3.30
SRR1260-330M	33.0	± 20	27	2.52	9.97	60.0	3.00	2.80
SRR1260-390M	39.0	± 20	22	2.52	10.40	70.0	2.80	2.70
SRR1260-470M	47.0	± 20	22	2.52	7.63	86.0	2.60	2.50
SRR1260-560M	56.0	± 20	24	2.52	7.92	100.0	2.30	2.20
SRR1260-680M	68.0	± 20	22	2.52	7.43	110.0	2.10	2.10
SRR1260-820M	82.0	± 20	25	2.52	6.85	145.0	1.95	1.90
SRR1260-101M	100.0	± 20	26	0.796	6.07	180.0	1.70	1.70
SRR1260-121K	120.0	± 10	26	0.796	5.50	210.0	1.65	1.65
SRR1260-151K	150.0	± 10	20	0.796	5.00	260.0	1.55	1.55
SRR1260-181K	180.0	± 10	26	0.796	4.50	320.0	1.40	1.40
SRR1260-221K	220.0	± 10	22	0.796	4.20	380.0	1.38	1.30
SRR1260-271K	270.0	± 10	20	0.796	3.60	450.0	1.30	1.20
SRR1260-331K	330.0	± 10	22	0.796	3.20	580.0	1.15	1.10
SRR1260-391K	390.0	± 10	20	0.796	2.80	700.0	1.08	1.00
SRR1260-471K	470.0	± 10	18	0.796	2.60	820.0	0.95	0.90
SRR1260-561K	560.0	± 10	22	0.796	2.40	1000.0	0.88	0.80
SRR1260-681K	680.0	± 10	18	0.796	2.20	1150.0	0.80	0.75
SRR1260-821K	820.0	± 10	20	0.796	2.00	1500.0	0.73	0.63
SRR1260-102K	1000.0	± 10	30	0.252	1.80	1700.0	0.68	0.60

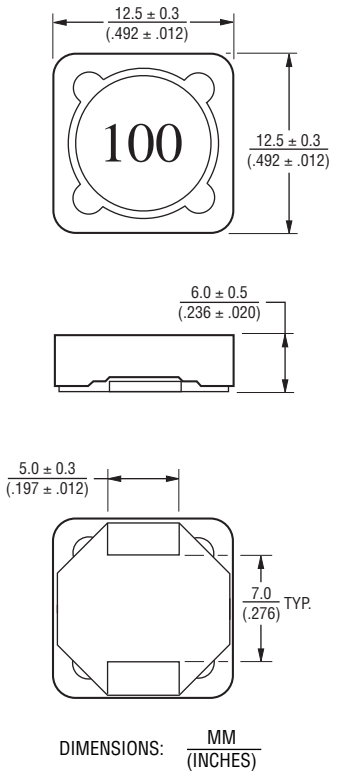
General Specifications

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.
Temperature Rise
..... 40 °C max. at rated I rms
Inductance Drop ..... 25 % typ. at I sat

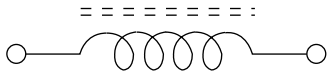
Materials

Core ..... Ferrite DR and RI
Wire ..... Enameled copper wire 130
Terminal ..... Cu/Ni/Sn
Packaging ..... 600 pcs. per reel

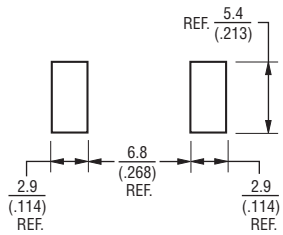
Product Dimensions



Electrical Schematic

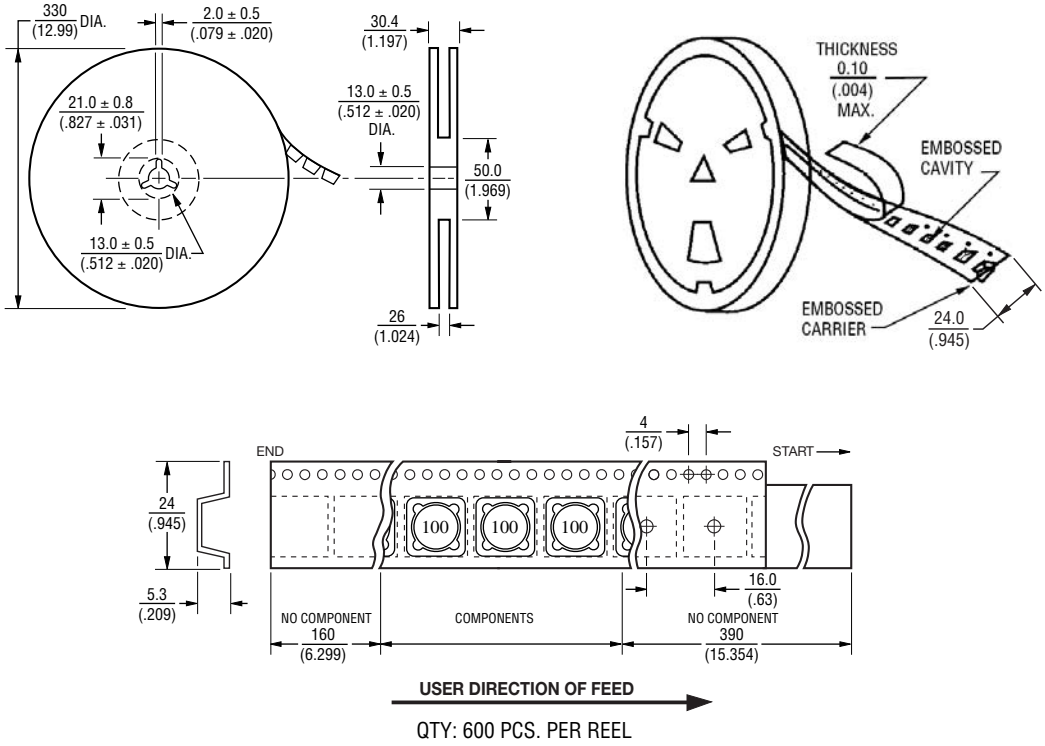


Recommended Layout



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

Packaging Specifications



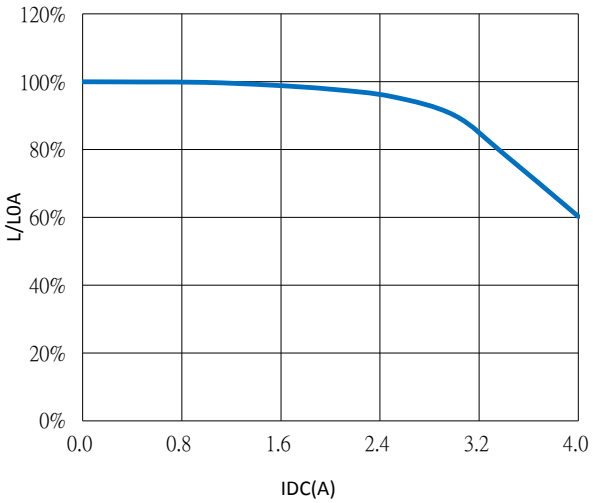
QTY: 600 PCS. PER REEL

REV. 03/15

TEST CURVE

		PROD. NAME	Shielded SMD Power Inductor
		PART NO.	SRR1260-470M

■Inductance VS Current



IDC (A)	0	0.5	1.0	1.5	2.0	2.5	3.0	3.4	4.0	
L@25℃	47.68	47.65	47.59	47.23	46.64	45.58	42.96	37.51	28.72	
L/L0A	100%	99.94%	99.81%	99.06%	97.82%	95.60%	90.10%	78.67%	60.23%	

■Test Condition : 1kHz/1V

■ Test Instrument: WK3260B+WK355B

■ Test Time:

DRAWN	CHECKED	APPROVED	
Leo.Liang 2016/10/27		Nick Chen 2016/10/27	2016/10/27

BOURNS® Reliability Test Report

TITLE：**Temperature Characteristic Test**

PART NO. ： SRR1260-470M

Equipment：Humidity&Temp. Champer

Test Equipment：LCR Meter(4194A)

Test condition :

1. Test temperature : -40 ℃ ~ 125 ℃
2. The inductance of each specimen shall be measured 30 to 45 minutes after the chamber temperature has become stable to within ±0.5°C at a test temperature.

Specification :

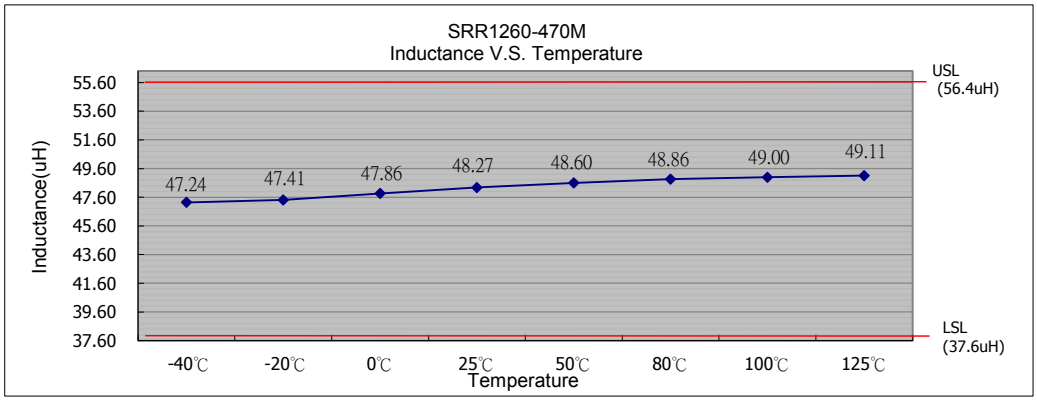
The value of L, shall be meet the specification, as folllow:

Part No.	SRR1260-470M
L(μH)	47.0±20%

Test data :

L(uH) { 1kHz/1V }								
No.	-40℃	-20℃	0℃	25℃	50℃	80℃	100℃	125℃
1	46.97	47.15	47.56	47.98	48.32	48.59	48.72	48.83
2	47.56	47.79	48.22	48.63	48.96	49.22	49.35	49.46
3	47.60	47.73	48.22	48.62	48.95	49.20	49.33	49.44
4	47.32	47.48	47.95	48.39	48.73	49.01	49.16	49.27
5	46.77	46.93	47.35	47.75	48.05	48.30	48.43	48.54
Max	47.60	47.79	48.22	48.63	48.96	49.22	49.35	49.46
Min	46.77	46.93	47.35	47.75	48.05	48.30	48.43	48.54
Average	47.24	47.41	47.86	48.27	48.60	48.86	49.00	49.11
♂n-1	0.362	0.372	0.393	0.393	0.402	0.406	0.409	0.405

Inductance V.S. Temperature curve :



Result :

The result of testing can meet the specification.

DRAWN：Donald Yu	CHECKED ：Jeny Yang	APPROVED：Fang Lu
DATE：NOV.10,2016	DATE：NOV.10,2016	DATE：NOV.10,2016