



**THE DATASHEET OF
SRR1210-681M**





Features

- Available in E12 series
- Height of 10 mm
- Current rating up to 11 A
- RoHS compliant*

Applications

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

SRR1210 Series - Shielded SMD Power Inductors

Electrical Characteristics

Bourns Part No.	Inductance 1 kHz / 0.25 V		Q Ref.	Test Frequency (MHz)	SRF MHz Typ.	DCR max. (mΩ)	I rms (A)	I sat (A)	**K- Factor
	μH	Tol. %							
SRR1210-1R0Y	1.0	±30	10	7.96	85	6.0	11.0	16.5	86
SRR1210-1R8Y	1.8	±30	10	7.96	56	7.5	10.2	13.2	67
SRR1210-2R2Y	2.2	±30	10	7.96	54	9.0	9.5	12.2	55
SRR1210-3R3Y	3.3	±30	15	7.96	44	10	9.0	10.5	46
SRR1210-4R7Y	4.7	±30	8	7.96	35	12	8.5	9.6	40
SRR1210-5R6Y	5.6	±30	12	7.96	28	14	8.0	8.5	35
SRR1210-6R8Y	6.8	±30	12	7.96	20	15	7.9	8.3	32
SRR1210-8R2Y	8.2	±30	11	7.96	16	17	7.3	7.5	29
SRR1210-100M	10	±20	16	2.52	12	18	6.5	6.5	26
SRR1210-120M	12	±20	14	2.52	18	22	6.3	6.1	24
SRR1210-150M	15	±20	16	2.52	10.5	32	5.8	5.3	21
SRR1210-180M	18	±20	13	2.52	8.0	35	5.5	5.1	19
SRR1210-220M	22	±20	16	2.52	8.0	38	5.2	4.5	17
SRR1210-270M	27	±20	16	2.52	6.5	40	5.0	4.2	15
SRR1210-330M	33	±20	16	2.52	6.5	52	4.4	3.7	14
SRR1210-390M	39	±20	16	2.52	4.5	66	4.2	3.5	13
SRR1210-470M	47	±20	16	2.52	4.5	72	3.8	3.1	12
SRR1210-560M	56	±20	8	2.52	4.0	90	3.4	2.9	11
SRR1210-680M	68	±20	12	2.52	3.8	102	3.0	2.7	10
SRR1210-820M	82	±20	15	2.52	3.5	112	2.8	2.5	9
SRR1210-101M	100	±20	16	0.796	3.0	135	2.5	2.2	8
SRR1210-121M	120	±20	13	0.796	2.6	170	2.3	1.9	7
SRR1210-151M	150	±20	12	0.796	2.2	190	2.2	1.8	7
SRR1210-181M	180	±20	14	0.796	1.8	250	1.9	1.6	6
SRR1210-221M	220	±20	15	0.796	1.8	315	1.7	1.5	5
SRR1210-271M	270	±20	16	0.796	1.8	410	1.5	1.3	5
SRR1210-331M	330	±20	14	0.796	1.8	450	1.4	1.2	4
SRR1210-391M	390	±20	16	0.796	1.3	600	1.3	1.1	4
SRR1210-471M	470	±20	12	0.796	0.85	820	1.2	1.0	4
SRR1210-561M	560	±20	12	0.796	0.85	900	1.1	0.95	3
SRR1210-681M	680	±20	11	0.796	0.85	1200	1.0	0.85	3
SRR1210-821M	820	±20	6	0.796	0.85	1320	0.85	0.75	3
SRR1210-102M	1000	±20	22	0.796	0.85	1650	0.75	0.70	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.

Schematic



Recommended Layout



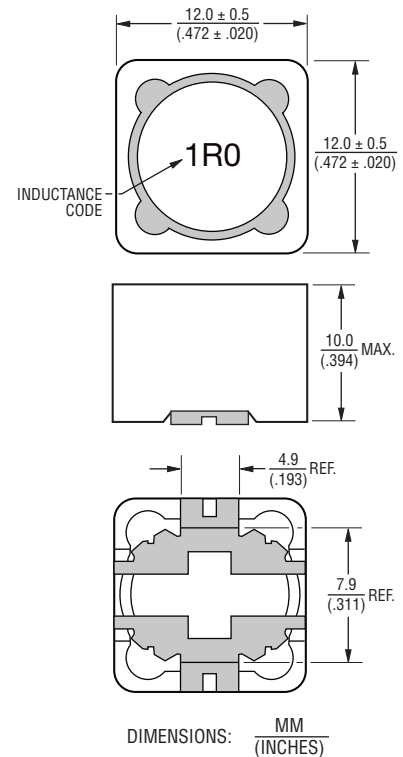
General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)
Storage Temperature -40 °C to +125 °C
Resistance to Soldering Heat 260 °C for 5 sec.
Rated Current Ind. drop of 20 % typ. at Isat
Temperature Rise .. 40 °C typical at Irms
Moisture Sensitivity Level 1
ESD Classification (HBM)..... N/A

Materials

Core..... Ferrite DR & RI
Wire Enameled copper
Terminal coating Matte Sn
Packaging..... 250 pcs. per reel

Product Dimensions



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

Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf



WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

SRR1210 Series - Shielded SMD Power Inductors

BOURNS®

Core Loss vs. Flux Density



Packaging Specifications



REV. 03/18

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