



Features

- High saturation current - up to 20 A
- Inductance range: 1.5 to 1000 µH
- Heating current up to 9.5 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

Applications

- DC/DC converters
- Power supplies

SDR1307A Series - SMD Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance @ 100 KHz / 0.1 V		Q (Ref.)	Test Freq. (MHz)	SRF (MHz) Typ.	DCR (Ω) Max.	I rms (A)	I sat (A)
	L (µH)	Tol. (%)						
SDR1307A-1R5M	1.5	±20	20	7.96	65	0.005	9.5	20
SDR1307A-2R2M	2.2	±20	22	7.96	50	0.006	9.0	18
SDR1307A-2R7M	2.7	±20	24	7.96	40	0.008	8.2	16
SDR1307A-3R3M	3.3	±20	26	7.96	38	0.0087	7.5	15
SDR1307A-4R7M	4.7	±20	25	7.96	36	0.01	7.0	13
SDR1307A-5R6M	5.6	±20	24	7.96	28	0.015	6.5	11
SDR1307A-6R8M	6.8	±20	24	7.96	26	0.017	6.0	10.5
SDR1307A-8R2M	8.2	±20	24	7.96	24	0.019	5.8	9.8
SDR1307A-100M	10	±20	22	2.52	22	0.021	5.6	9.2
SDR1307A-120M	12	±20	25	2.52	20	0.03	4.8	8
SDR1307A-150M	15	±20	28	2.52	17	0.034	4.5	7.5
SDR1307A-180M	18	±20	28	2.52	16	0.036	4.2	7
SDR1307A-220M	22	±20	40	2.52	15	0.047	3.6	6.5
SDR1307A-270M	27	±20	35	2.52	11	0.06	3.3	5.5
SDR1307A-330K	33	±10	35	2.52	10	0.065	3.1	5
SDR1307A-390K	39	±10	28	2.52	9	0.075	2.9	4.6
SDR1307A-470K	47	±10	24	2.52	7.5	0.082	2.7	4.2
SDR1307A-560K	56	±10	22	2.52	7.2	0.10	2.5	3.8
SDR1307A-680K	68	±10	24	2.52	7	0.12	2.3	3.5
SDR1307A-820K	82	±10	18	2.52	6	0.14	2.1	3.2
SDR1307A-101K	100	±10	25	0.796	5.8	0.18	1.9	3
SDR1307A-121K	120	±10	20	0.796	5.5	0.21	1.8	2.8
SDR1307A-151K	150	±10	20	0.796	4.5	0.25	1.6	2.6
SDR1307A-181K	180	±10	18	0.796	4	0.28	1.5	2.3
SDR1307A-221K	220	±10	15	0.796	3.8	0.36	1.3	2.1
SDR1307A-271K	270	±10	15	0.796	3.5	0.41	1.2	1.8
SDR1307A-331K	330	±10	15	0.796	3.2	0.52	1.1	1.6
SDR1307A-391K	390	±10	12	0.796	2.5	0.60	1.0	1.5
SDR1307A-471K	470	±10	12	0.796	2.2	0.72	0.9	1.4
SDR1307A-561K	560	±10	10	0.796	2	0.88	0.85	1.3
SDR1307A-681K	680	±10	10	0.796	1.6	1.0	0.8	1.2
SDR1307A-821K	820	±10	10	0.796	1.5	1.3	0.75	1.1
SDR1307A-102K	1000	±10	10	0.252	1.4	1.6	0.65	1

General Specifications

Operating Temperature -40 °C to +125 °C
(Temperature rise included)

Storage Temperature -40 °C to +125 °C

Resistance to Soldering Heat +245 °C for 10 sec.

Temperature Rise 40 °C typ. at rated I rms
Inductance Drop 10 % typ. at I sat

Materials

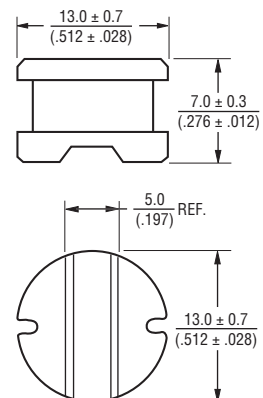
Core Ferrite

Wire Enamelled copper

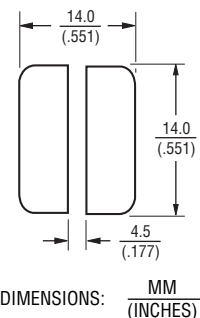
Terminal Finish Ag/Ni/Sn

Packaging 400 pcs. per reel

Product Dimensions



Recommended Layout



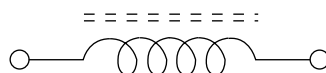
How to Order

SDR1307A - 100M

Model _____

Value Code (see table) _____

Electrical Schematic



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

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

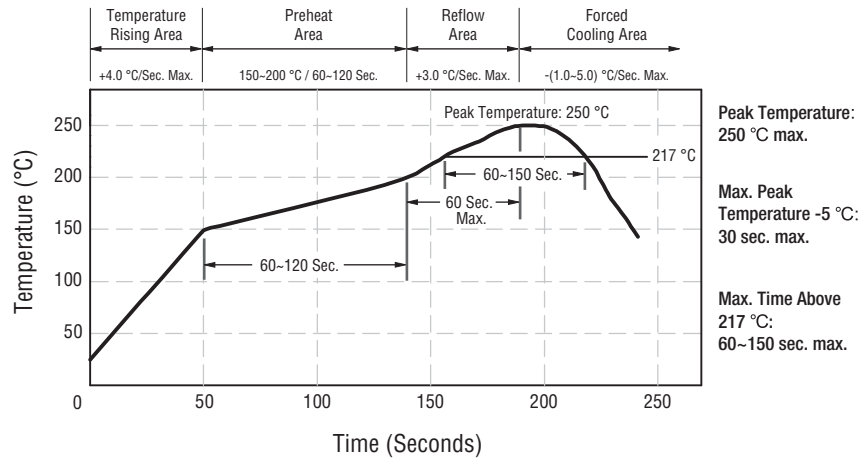
** Bourns considers a product to be "halogen free" if (a) the Bromine (Br) content is 900 ppm or less; (b) the Chlorine (Cl) content is 900 ppm or less; and (c) the total Bromine (Br) and Chlorine (Cl) content is 1500 ppm or less.

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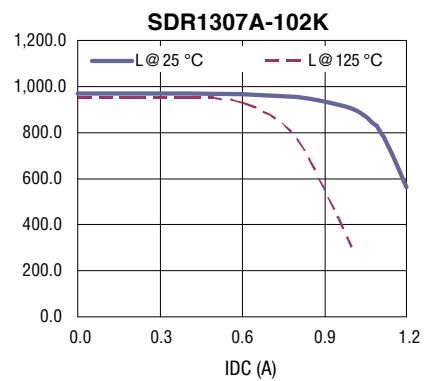
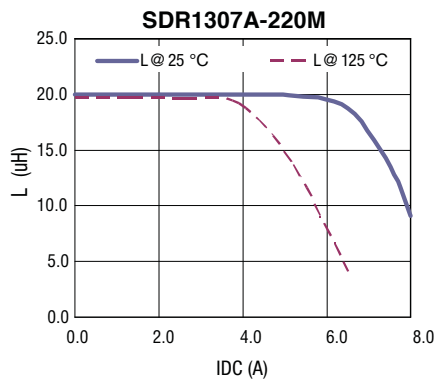
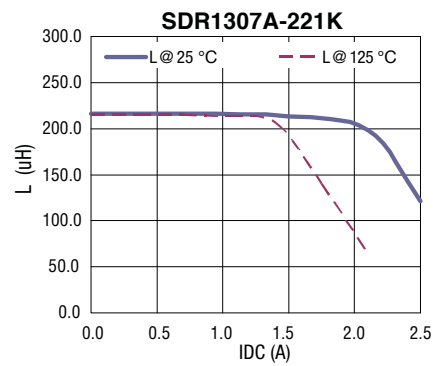
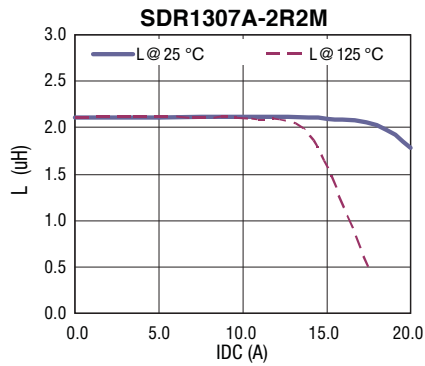
SDR1307A Series - SMD Power Inductors

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Soldering Profile



L vs. IDC

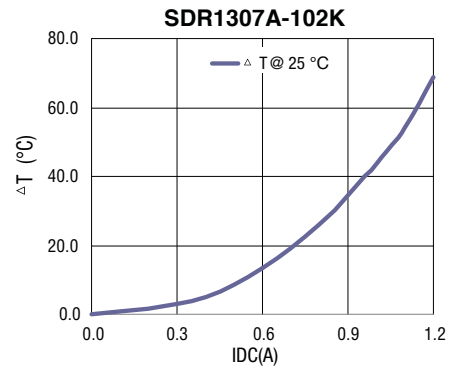
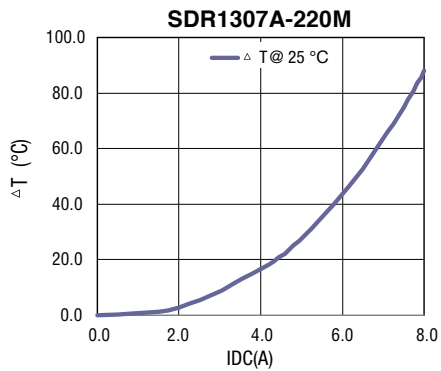
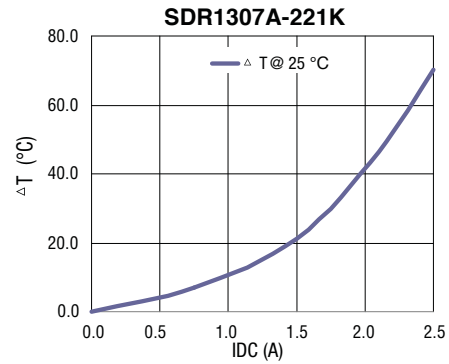
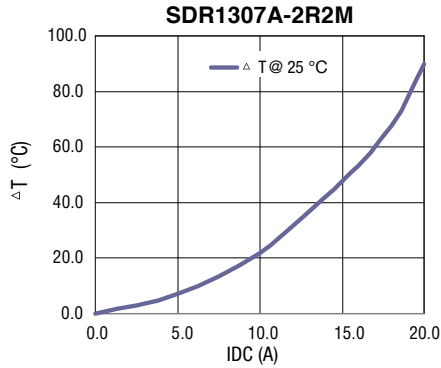


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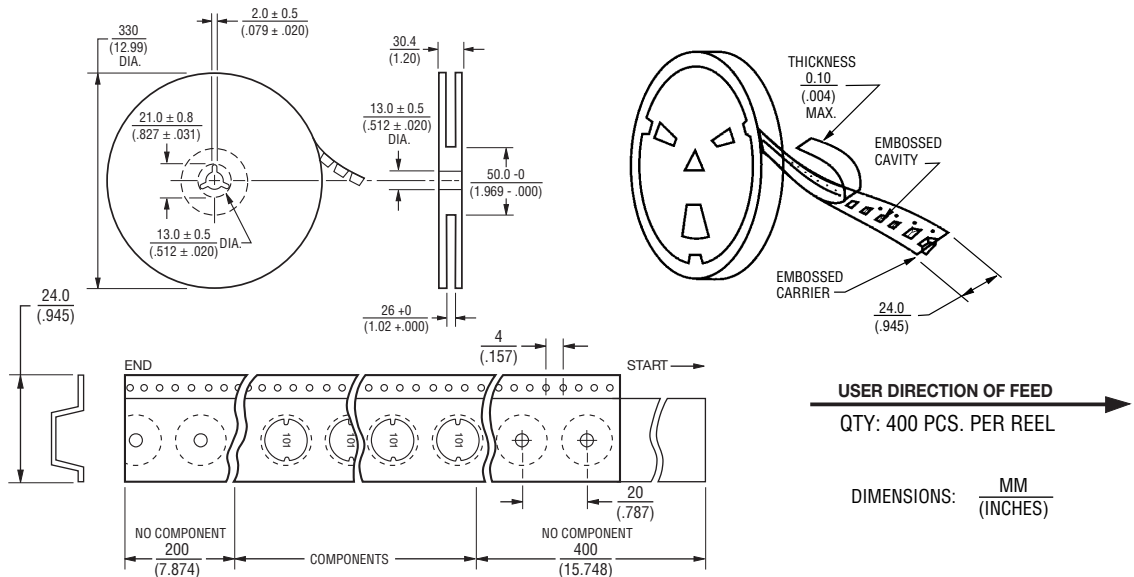
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Temperature vs. IDC



Packaging Specifications



REV. 11/18

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