



Features

- High saturation current - up to 8 A
- Inductance range: 1.5 to 820 μ H
- Heating current up to 7.2 A
- AEC-Q200 qualified
- RoHS compliant* and halogen free**

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SDE1006A Series – SMD Power Inductors

Electrical Specifications @ 25 °C

Bourns Part Number	Inductance		Test Freq./Voltage	SRF (MHz) Typ.	DCR (Ω) Max.	I rms (A)	I sat (A)
	L (μ H)	Tol. (%)					
SDE1006A-1R5M	1.5	20	1 MHz / 1 V	69.6	0.018	7.2	8.0
SDE1006A-2R2M	2.2	20	1 MHz / 1 V	57.7	0.021	6.0	6.6
SDE1006A-3R3M	3.3	20	1 MHz / 1 V	48.8	0.024	5.4	6.0
SDE1006A-3R9M	3.9	20	1 MHz / 1 V	40.6	0.027	5.2	5.7
SDE1006A-4R7M	4.7	20	1 MHz / 1 V	37.4	0.036	4.7	5.2
SDE1006A-5R6M	5.6	20	1 MHz / 1 V	35.6	0.04	4.5	5.0
SDE1006A-6R8M	6.8	20	1 MHz / 1 V	32.1	0.044	4.2	4.6
SDE1006A-8R2M	8.2	20	1 MHz / 1 V	27.9	0.048	4.1	4.3
SDE1006A-100M	10	20	1 MHz / 1 V	25	0.06	3.8	4.0
SDE1006A-120M	12	20	1 MHz / 1 V	23	0.07	3.6	3.8
SDE1006A-150M	15	20	1 MHz / 1 V	19.8	0.08	3.4	3.6
SDE1006A-180M	18	20	1 MHz / 1 V	19.3	0.09	2.8	3.0
SDE1006A-220M	22	20	1 MHz / 1 V	16	0.1	2.6	2.8
SDE1006A-270M	27	20	1 MHz / 1 V	13.3	0.11	2.3	2.5
SDE1006A-330M	33	20	1 MHz / 1 V	12.1	0.12	2.2	2.4
SDE1006A-390M	39	20	1 MHz / 1 V	12	0.14	1.9	2.1
SDE1006A-470K	47	10	1 MHz / 1 V	11	0.17	1.8	1.95
SDE1006A-560K	56	10	1 MHz / 1 V	10.2	0.19	1.7	1.8
SDE1006A-680K	68	10	1 MHz / 1 V	9.4	0.22	1.6	1.7
SDE1006A-820K	82	10	1 MHz / 1 V	8.8	0.25	1.5	1.6
SDE1006A-101K	100	10	1 KHz / 1 V	7.3	0.35	1.3	1.4
SDE1006A-121K	120	10	1 KHz / 1 V	6.6	0.4	1.2	1.3
SDE1006A-151K	150	10	1 KHz / 1 V	6.6	0.47	1.1	1.2
SDE1006A-181K	180	10	1 KHz / 1 V	6.1	0.63	1.0	1.1
SDE1006A-221K	220	10	1 KHz / 1 V	5.3	0.73	0.85	1.0
SDE1006A-271K	270	10	1 KHz / 1 V	4.3	0.97	0.75	0.85
SDE1006A-331K	330	10	1 KHz / 1 V	4.3	1.15	0.7	0.75
SDE1006A-391K	390	10	1 KHz / 1 V	3.3	1.3	0.65	0.7
SDE1006A-471K	470	10	1 KHz / 1 V	3.3	1.48	0.6	0.65
SDE1006A-561K	560	10	1 KHz / 1 V	3.3	1.9	0.55	0.6
SDE1006A-681K	680	10	1 KHz / 1 V	2.8	2.25	0.5	0.55
SDE1006A-821K	820	10	1 KHz / 1 V	2.2	2.55	0.45	0.5

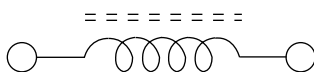
How to Order

SDE1006A - 100M

Model

Value Code (see table)

Electrical Schematic



General Specifications

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 10 % typ. at I sat

Materials

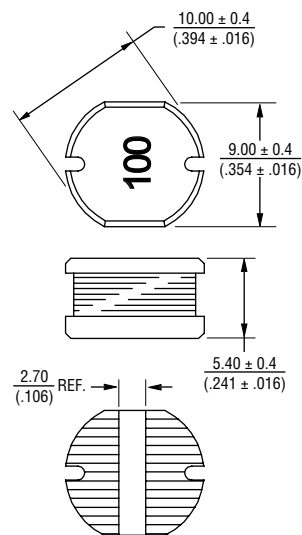
Core Ferrite

Wire Enameled copper

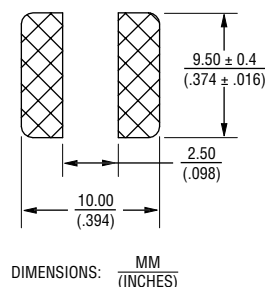
Terminal Finish Ag/Ni/Sn

Packaging 800 pcs. per reel

Product Dimensions



Recommended Layout



DIMENSIONS: MM (INCHES)



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

* RoHS Directive 2015/863, Mar 31, 2015 and Annex.

** 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.

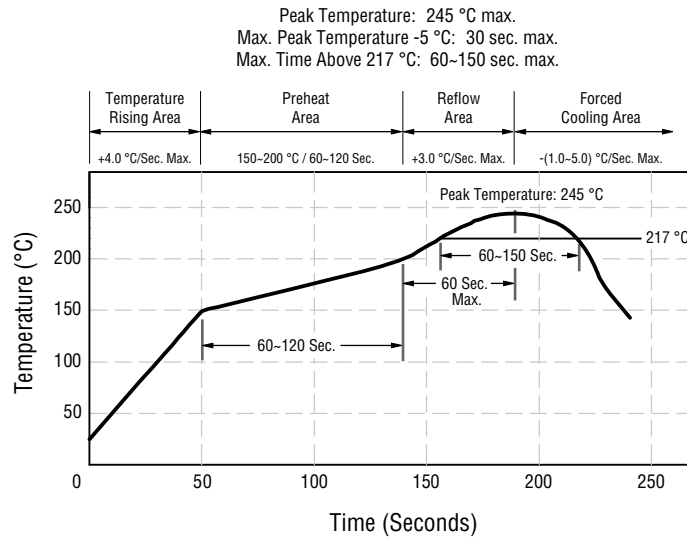
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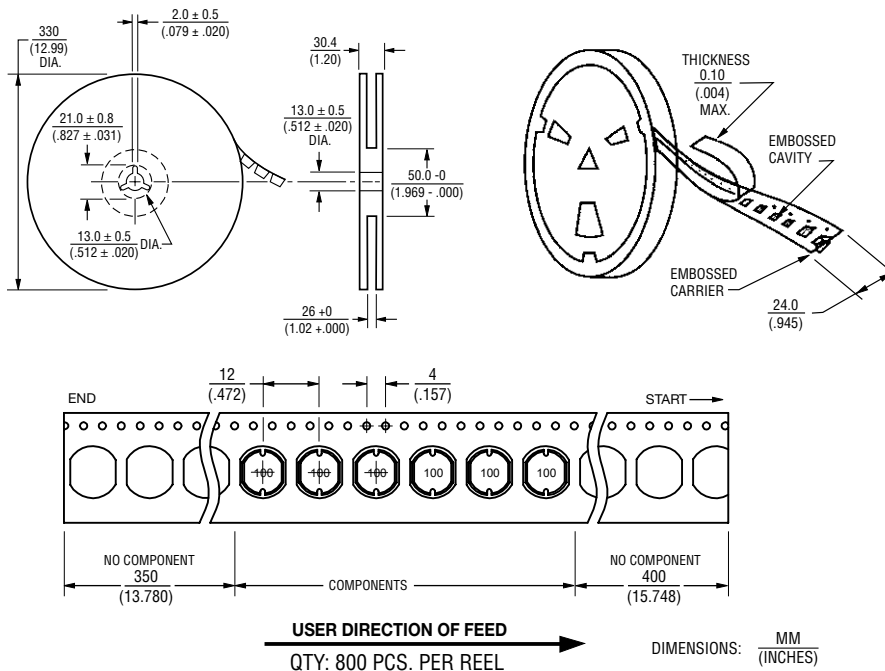
SDE1006A Series – SMD Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



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