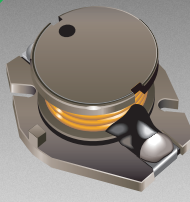


*RoHS COMPLIANT



BOURNS®

Features

- Available in E6 series
- Low profile of only 6.6 mm
- Inductance as low as 1 μH
- RoHS compliant*

Applications

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

SDR1806 Series - SMD Power Inductors

Electrical Specifications

Bourns Part Number	Inductance 100 kHz		Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	RDC Max. (m Ω)	I rms Max. (A)	I sat Typ. (A)
	(μH)	Tol. %						
SDR1806-1R0ML	1	± 20	21	7.96	100.0	4.0	10.0	30.00
SDR1806-2R2ML	2.2	± 20	22	7.96	55.0	6.8	9.00	22.00
SDR1806-3R3ML	3.3	± 20	22	7.96	40.0	9.8	7.60	17.00
SDR1806-5R6ML	5.6	± 20	23	7.96	30.0	15.0	6.40	12.80
SDR1806-8R2ML	8.2	± 20	22	7.96	27.0	20.0	7.00	9.40
SDR1806-100ML	10.0	± 20	22	2.52	25.0	25.0	5.30	10.00
SDR1806-150ML	15.0	± 20	20	2.52	17.0	35.0	4.30	8.00
SDR1806-220ML	22.0	± 20	22	2.52	13.0	45.0	3.60	6.70
SDR1806-330ML	33.0	± 20	24	2.52	11.0	68.0	3.00	5.40
SDR1806-470ML	47.0	± 20	22	2.52	9.0	95.0	2.50	4.60
SDR1806-680ML	68.0	± 20	22	2.52	8.0	130.0	2.10	3.80
SDR1806-101KL	100.0	± 10	25	0.796	7.0	190.0	1.70	3.20
SDR1806-151KL	150.0	± 10	23	0.796	5.0	270.0	1.40	2.60
SDR1806-221KL	220.0	± 10	20	0.796	4.5	420.0	1.10	2.20
SDR1806-331KL	330.0	± 10	18	0.796	3.5	580.0	1.00	1.80
SDR1806-471KL	470.0	± 10	15	0.796	3.0	820.0	0.80	1.50
SDR1806-681KL	680.0	± 10	12	0.796	2.5	1200.0	0.70	1.20
SDR1806-102KL	1000.0	± 10	10	0.252	2.0	1800.0	0.50	1.00

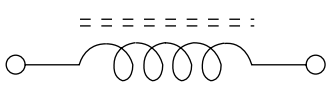
General Specifications

Test Voltage 0.1 V
 Reflow Soldering... 230 °C, 10 sec. max
 (In compliance with JEDEC, J-STD-020C, Table 4-2)
 Operating Temperature -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature... -40 °C to +125 °C
 Resistance to Soldering Heat 260 °C, 10 sec. max.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)..... N/A

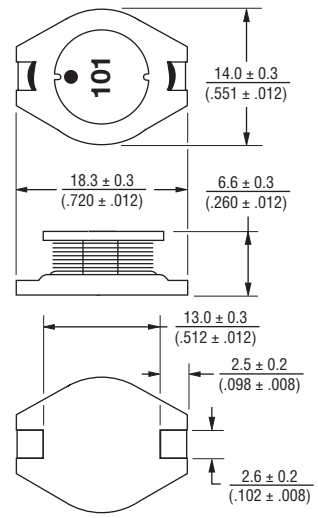
Materials

Core Ferrite DR
 Wire Enamelled copper
 Base LCP E4008
 Terminal..... Cu/Sn
 Rated Current Ind. drop 10 % typ. at Isat
 Temperature Rise 40 °C max. at rated I rms
 Packaging..... 250 pcs. per reel

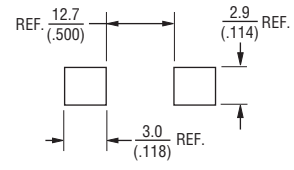
Electrical Schematic



Product Dimensions



Recommended Layout



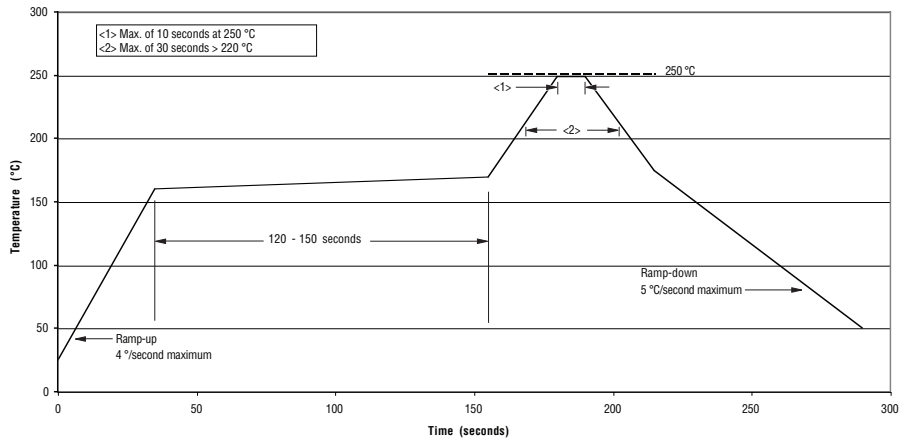
DIMENSIONS: $\frac{\text{MM}}{\text{(INCHES)}}$

*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. The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time. Users should verify actual device performance in their specific applications.

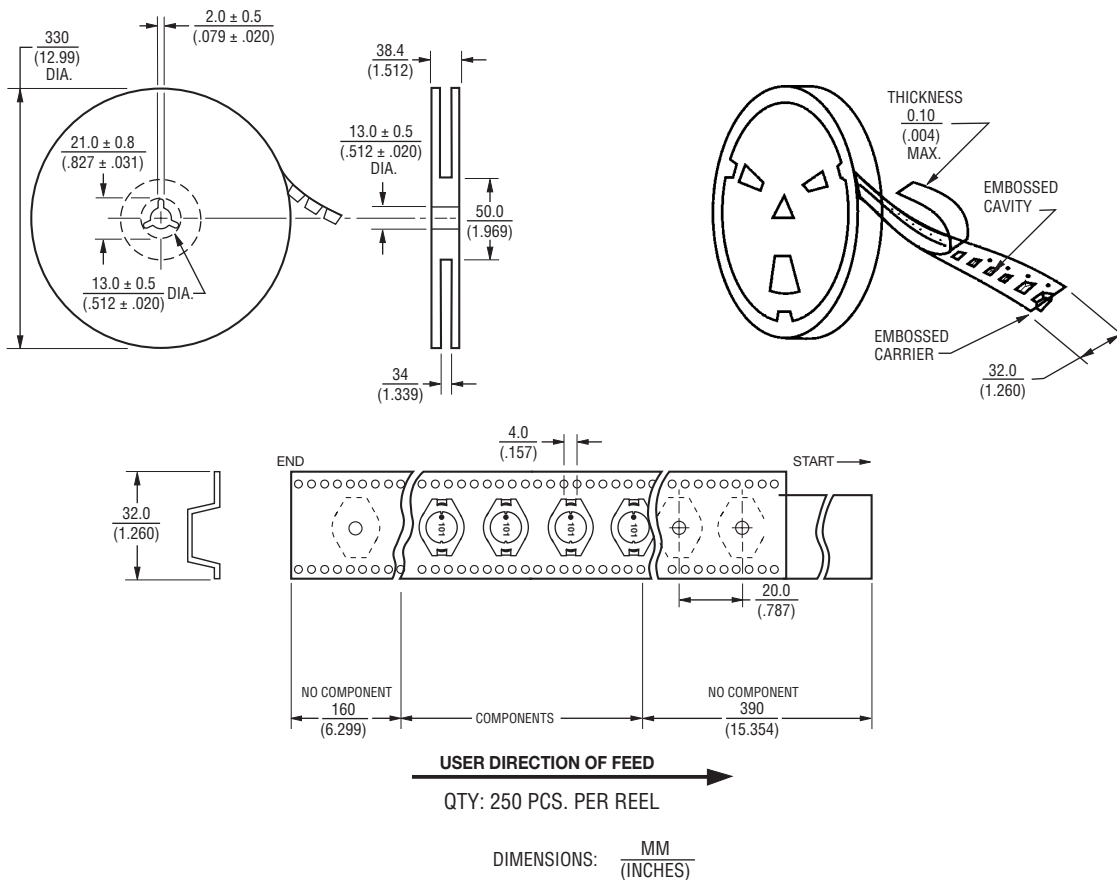
SDR1806 Series - SMD Power Inductors

BOURNS®

Soldering Profile



Packaging Specifications



REV. 03/18

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