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 (µH)	Tol. %	Q Ref.	Test Frequency (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)
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	6.00	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

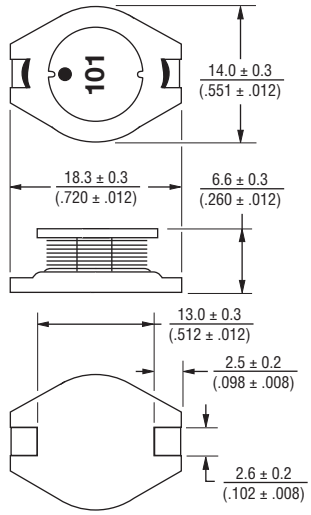
General Specifications

Test Voltage ..... 0.1 V
Operating Temperature
..... -40 °C to +125 °C
(Temperature rise included)
Storage Temperature.. -40 °C to +125 °C
Moisture Sensitivity Level..... 1
ESD Classification (HBM).....N/A

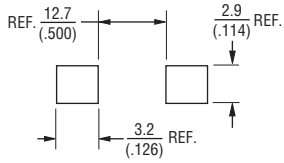
Materials

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

Product Dimensions



Recommended Layout



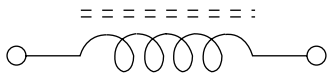
DIMENSIONS: MM (INCHES)

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Electrical Schematic



CALIFORNIA WARNING: Can expose you to lead, a carcinogen and reproductive toxicant.
See www.P65Warnings.ca.gov

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

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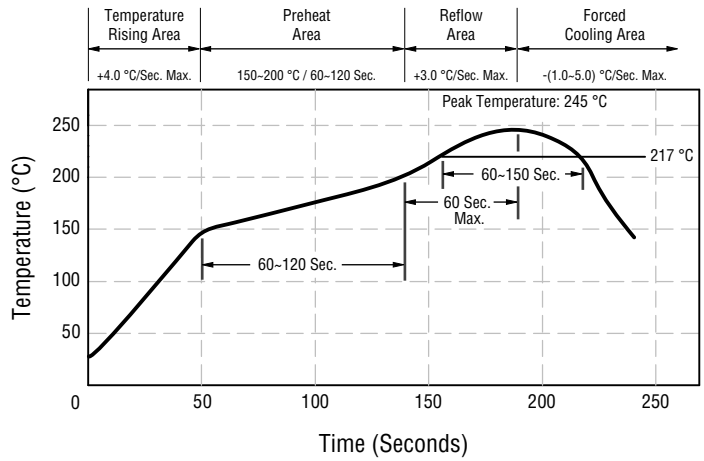
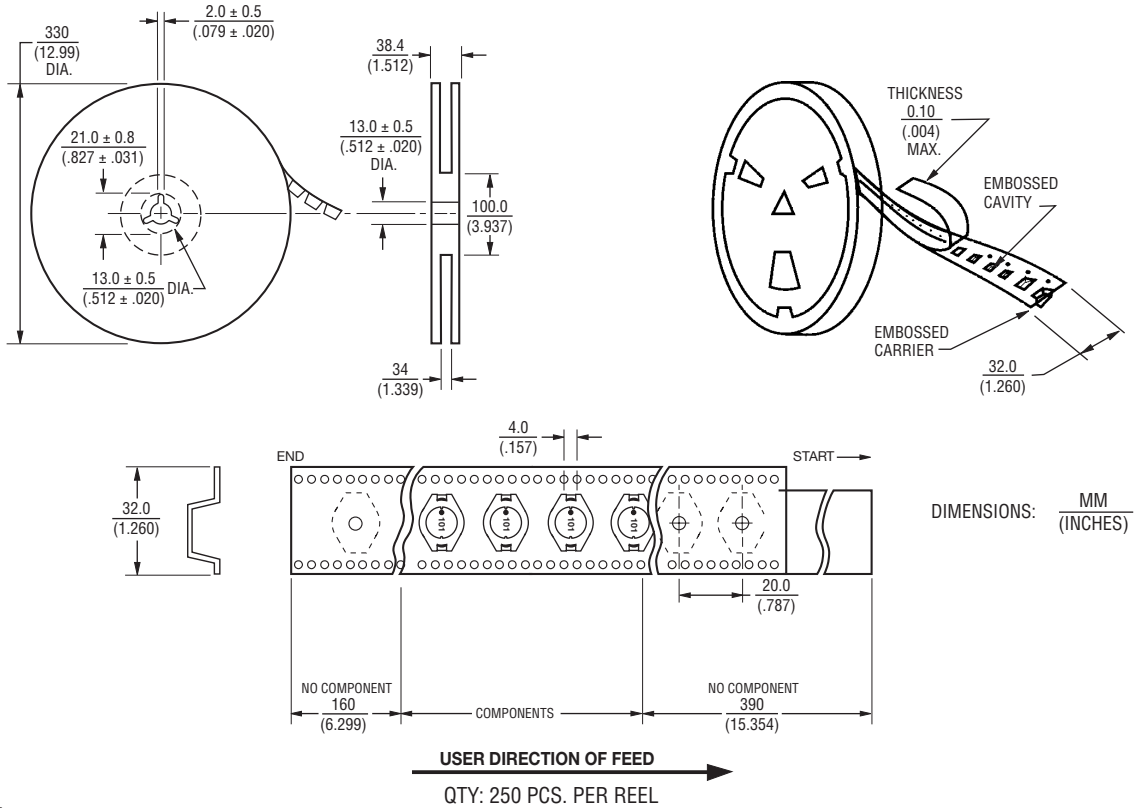
Soldering Profile

Peak Temperature: 245 °C max.
Max. Peak Temperature -5 °C: 30 sec. max.
Max. Time Above 217 °C: 60~150 sec. max.



Packaging Specifications



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