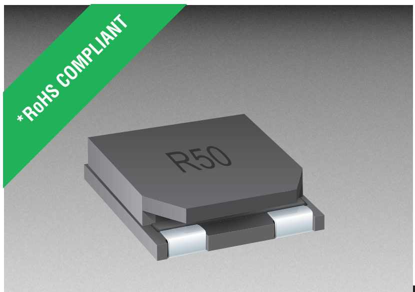


BOURNS®

Features

- Shielded construction
- Unit height of 4 mm
- Inductance range: 0.5 to 1.8 µH
- Current up to 13 A
- RoHS compliant*

Applications

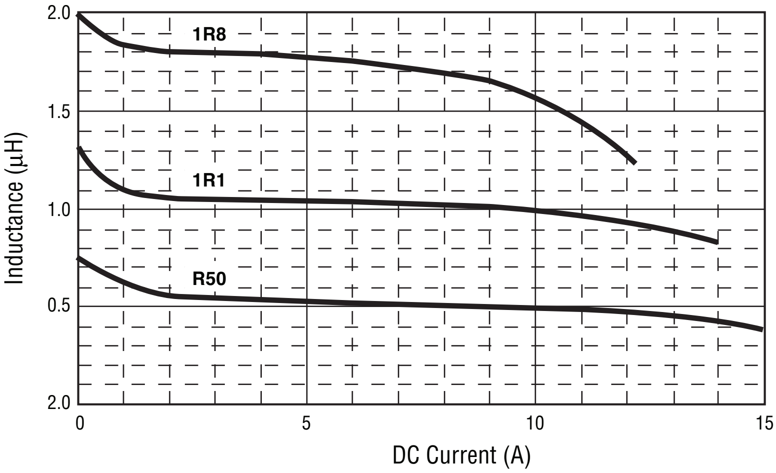
- Input/output of DC/DC converters
- Power supplies for:
  - Portable communications equipment
  - Camcorders
  - LCD TVs
  - Car audio systems

SRP1204 Series - Shielded Power Inductors

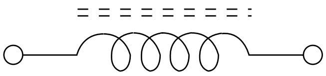
Electrical Specifications

Bourns Part No.	Initial Inductance L0 (µH)	Inductance at Flat Point L1 (µH)	Flat Point Ref. (A)	I rms (A)	I sat (A)	DCR (mΩ) Max.
SRP1204-R50M	0.75 ±20 %	0.55 ±20 %	2.0	13.0	14.0	3.0
SRP1204-1R1M	1.30 ±20 %	1.10 ±20 %	2.0	12.0	13.0	4.5
SRP1204-1R8M	2.00 ±20 %	1.80 ±20 %	2.0	10.0	11.0	6.0

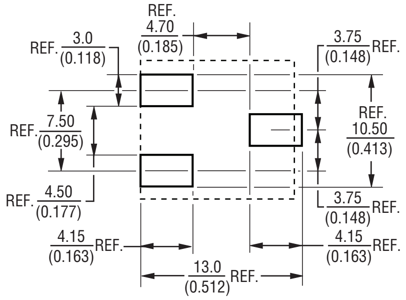
L vs I Charts



Electrical Schematic



Recommended Layout



General Specifications

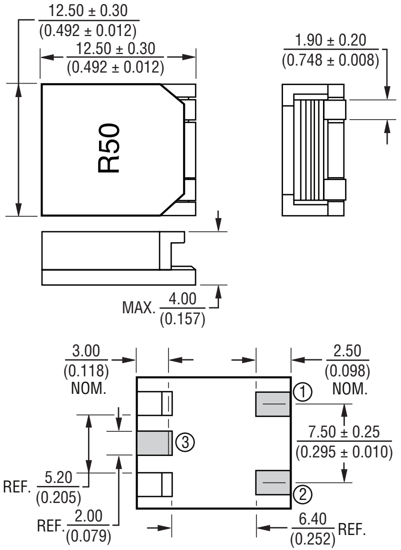
Test Voltage ....1 V
Test Frequency .... 100 KHz
Reflow Soldering .. 230 °C; 50 sec. max.
Operating Temperature
................................-40 °C to +125 °C
(Temperature rise included)
Storage Temperature
................................-40 °C to +125 °C
Resistance to Soldering Heat
.... +245 °C for 10 sec.
Moisture Sensitivity Level 1
ESD Classification (HBM)................. N/A

[1] Circuit design, component, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.

Materials

Core ....Ferrite ER
Wire ....Enameled copper
Terminal ....Cu/Ni/Sn
Rated Current ..... Ind. drops 20 % at Isat
Temperature Rise .....40 °C at rated Irms
Packaging....... 800 pcs. per 13-inch reel

Product Dimensions



③ CLIP (for mounting - no electrical connection)

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

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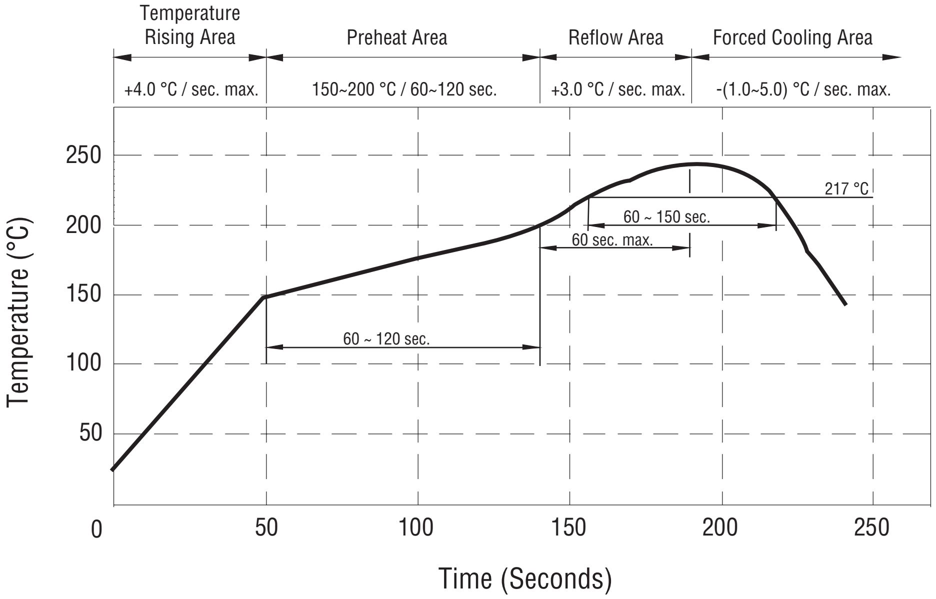
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.

Soldering Profile

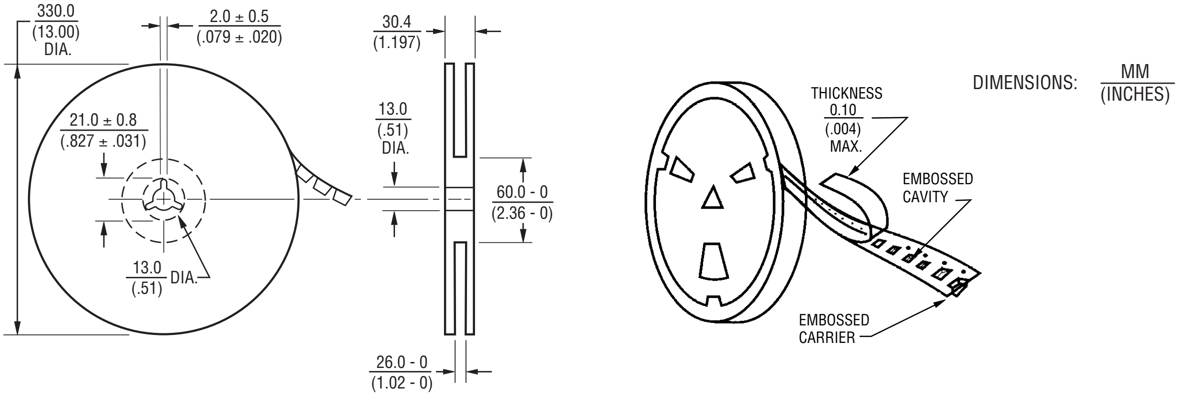


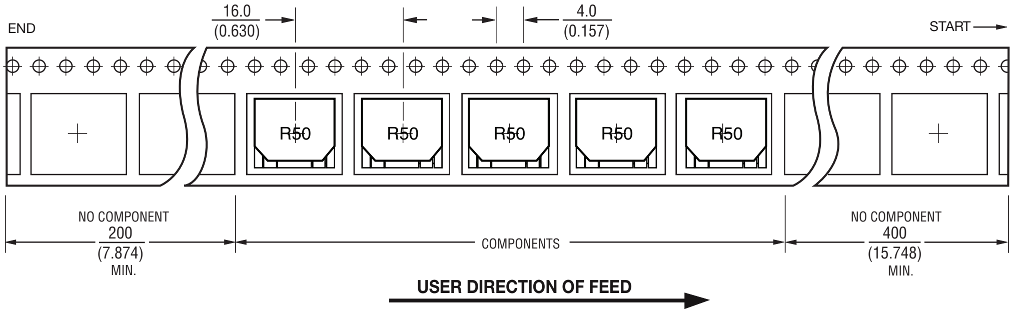
Peak Temperature:
245 °C max.

Time Above 245 °C:
30 sec. max.

Time Above 217 °C:
60 ~ 150 sec. max.

Packaging Specifications





USER DIRECTION OF FEED →

800 PCS. PER REEL

REV. 09/17