



Features

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

Applications

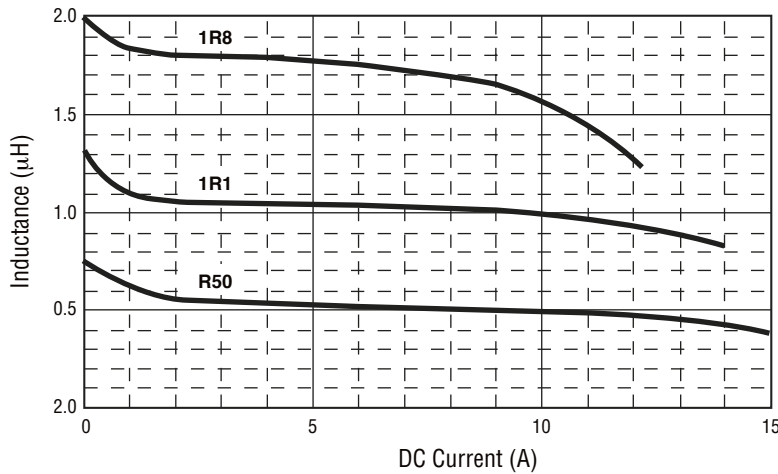
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs

SRP1204 Series - Shielded Power Inductors

Electrical Specifications

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

L vs I Charts



General Specifications

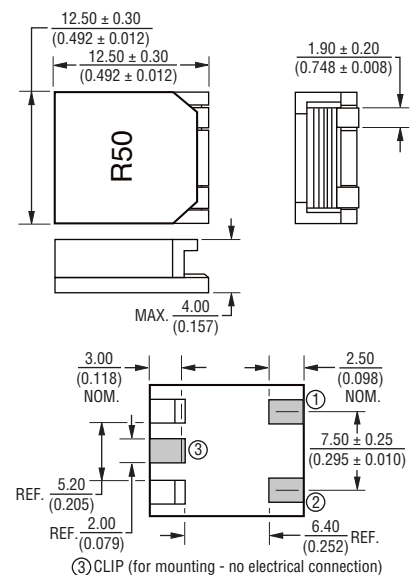
Test Voltage 1 V
 Test Frequency 100 KHz
 Reflow Soldering .. 230 °C; 50 sec. max.
 Operating Temperature
 -40 °C to +125 °C
 (Temperature rise included)
 Storage Temperature
 -40 °C to +125 °C
 Resistance to Soldering Heat
 +245 °C for 10 sec.
 Moisture Sensitivity Level 1
 ESD Classification (HBM)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

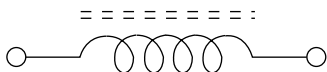
Materials

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

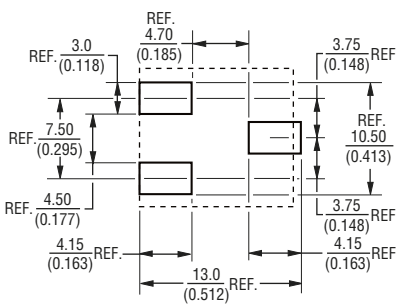
Product Dimensions



Electrical Schematic



Recommended Layout



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

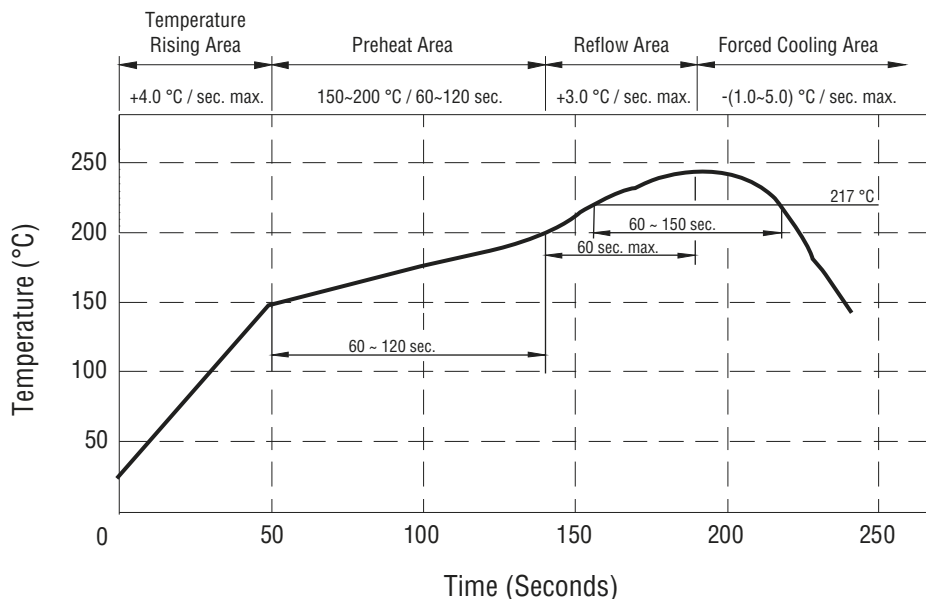
*RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011. Specifications are subject to change without notice. Users should verify actual device performance in their specific applications. The products described herein and this document are subject to specific legal disclaimers as set forth on the last page of this document, and at www.bourns.com/docs/legal/disclaimer.pdf

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

SRP1204 Series - Shielded Power Inductors

BOURNS®

Soldering Profile

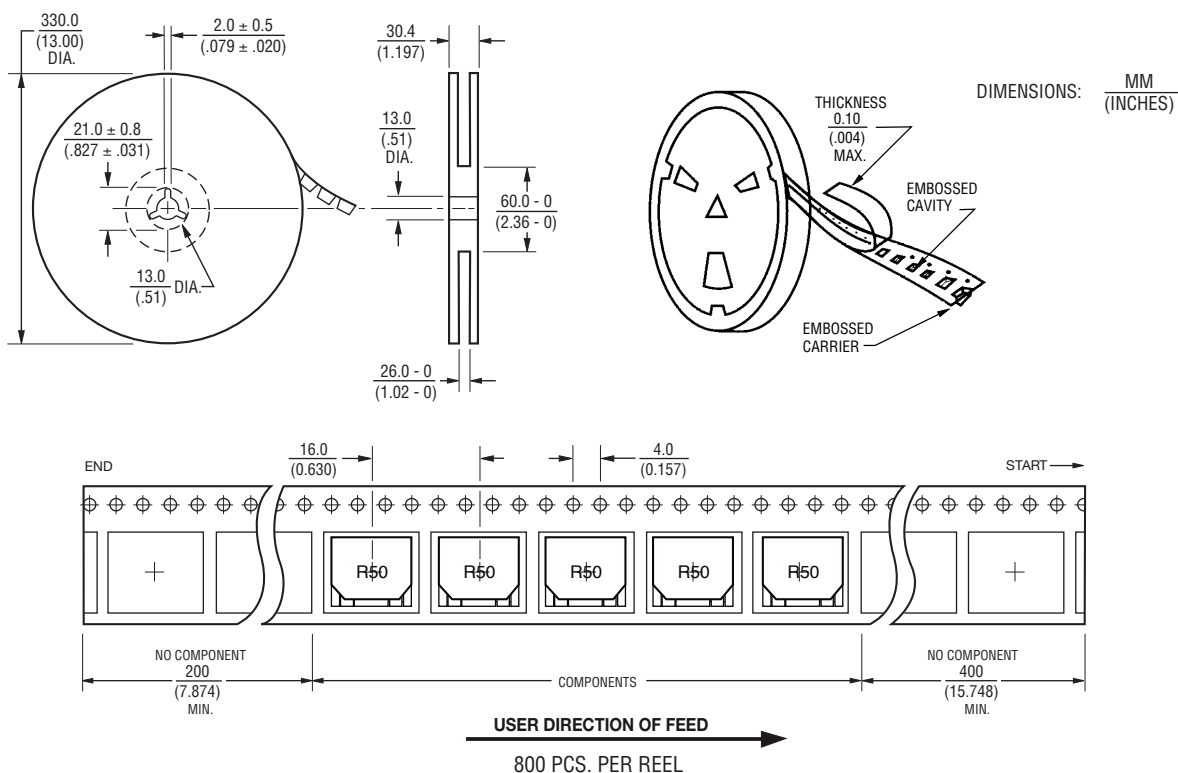


Peak Temperature:
245 °C max.

Time Above 245 °C:
30 sec. max.

Time Above 217 °C:
60 ~ 150 sec. max.

Packaging Specifications



REV. 03/18

Specifications are subject to change without notice.

Users should verify actual device performance in their specific applications.

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