

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

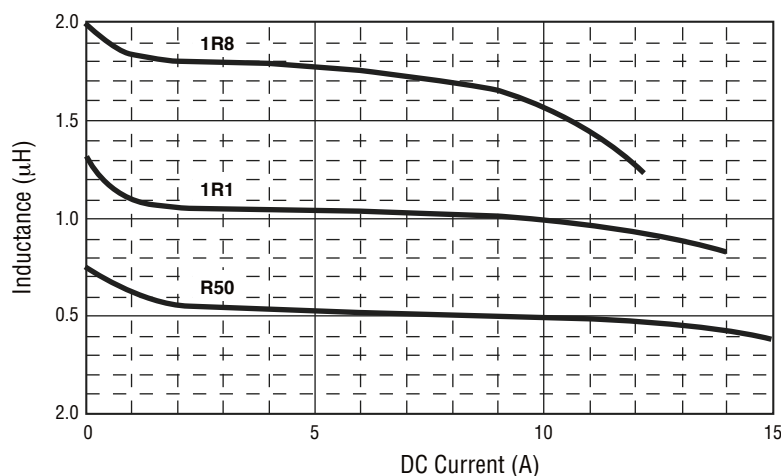
- Input/output of DC/DC converters
- Power supplies for:
 - Portable communications equipment
 - Camcorders
 - LCD TVs

SRP1204 Series - Shielded Power Inductors

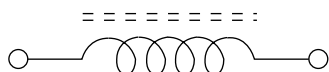
Electrical Specifications

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

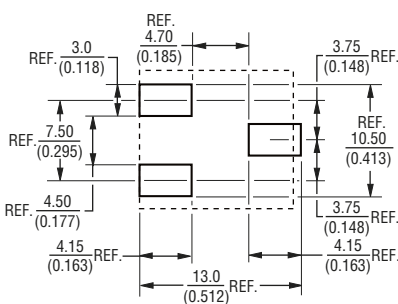
L vs I Charts



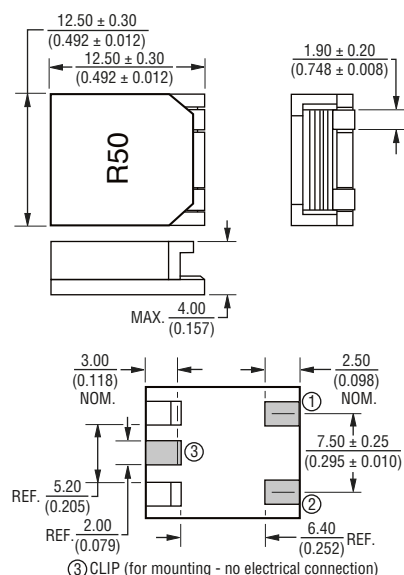
Electrical Schematic



Recommended Layout



Product Dimensions



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



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

BOURNS®

The graph illustrates the temperature profile of a soldering process, showing Temperature (°C) on the Y-axis (0 to 250) and Time (Seconds) on the X-axis (0 to 250). The profile is divided into four distinct areas:

- Temperature Rising Area:** 0 to 50 seconds, with a maximum rate of $+4.0\text{ }^{\circ}\text{C/sec.}$
- Preheat Area:** 50 to 140 seconds, with a temperature range of $150\text{--}200\text{ }^{\circ}\text{C}$ and a time range of $60\text{--}120\text{ sec.}$
- Reflow Area:** 140 to 210 seconds, with a maximum rate of $+3.0\text{ }^{\circ}\text{C/sec.}$. It includes sub-intervals of $60\text{--}150\text{ sec.}$ and 60 sec. max. .
- Forced Cooling Area:** 210 to 240 seconds, with a maximum rate of $-(1.0\text{--}5.0)\text{ }^{\circ}\text{C/sec.}$

Key temperature points and time intervals are marked on the graph:

- Temperature reaches $150\text{ }^{\circ}\text{C}$ at 50 seconds.
- Temperature reaches a peak of $217\text{ }^{\circ}\text{C}$ at approximately 190 seconds.
- Temperature reaches $140\text{ }^{\circ}\text{C}$ at 240 seconds.
- Time intervals for $60\text{--}120\text{ sec.}$, $60\text{--}150\text{ sec.}$, and 60 sec. max. are indicated.

Time Above 217 °C:
60 ~ 150 sec. max.

Top View:

- Overall Diameter: $\frac{330.0}{(13.00)}$ DIA.
- Inner Circle Diameter: $\frac{21.0 \pm 0.8}{(.827 \pm .031)}$
- Central Feature Diameter: $\frac{13.0}{(.51)}$ DIA.

Side View:

- Carrier Thickness: $\frac{2.0 \pm 0.5}{(.079 \pm .020)}$
- Well Width: $\frac{30.4}{(1.197)}$
- Well Depth: $\frac{60.0 - 0}{(2.36 - 0)}$
- Bottom Flange Width: $\frac{26.0 - 0}{(1.02 - 0)}$

End View:

- THICKNESS: $\frac{0.10}{(.004)}$ MAX.
- EMBOSSED CAVITY
- EMBOSSED CARRIER

DIMENSIONS: MM / (INCHES)

Front View (Reel Layout):

- END → START →
- Segment Lengths: $\frac{16.0}{(0.630)}$, $\frac{4.0}{(0.157)}$
- Features: NO COMPONENT, R ϕ 50, COMPONENTS, NO COMPONENT
- Distances from Ends: $\frac{200}{(7.874)}$ MIN., $\frac{400}{(15.748)}$ MIN.
- USER DIRECTION OF FEED →
- 800 PCS. PER REEL

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- Поставка сложных, дефицитных, либо снятых с производства позиций;
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- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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