## : ©hipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation, and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!


## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email \& Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, \#122 Zhenhua RD., Futian, Shenzhen, China


## Features

- Wirewound construction
- Iron powder core
- Magnetically shielded construction provides low radiation
- Low DC resistance
- Low profile
- RoHS compliant*


## Applications

- DC/DC converters for:
- Smart phones
- DVC/DSCs
- Tablets
- HDD/SSDs
- Mobile electronic devices

BOURNS*
SRP2512 Series - SMD Power Inductors

Electrical Specifications @ $25^{\circ} \mathrm{C}$

| Bourns <br> Part Number | Inductance@ $1 \mathrm{MHz} / 1 \mathrm{~V}$ |  | DCR <br> ( $\mathrm{m} \Omega$ ) Max. | Irms <br> (A) | Isat <br> (A) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{L}(\mu \mathrm{H})$ | Tol. (\%) |  |  |  |
| SRP2512-R47M | 0.47 | 20 | 25 | 4.5 | 5.3 |
| SRP2512-R68M | 0.68 | 20 | 35 | 3.7 | 4.1 |
| SRP2512-1R0M | 1 | 20 | 49 | 3.4 | 3.4 |
| SRP2512-1R5M | 1.5 | 20 | 77 | 2.5 | 3.2 |
| SRP2512-2R2M | 2.2 | 20 | 104 | 2.1 | 3.0 |

## How to Order

## Electrical Schematic



Value Code (see table) $\square$

## Soldering Profile



| Profile Feature | Pb Free Assembly |
| :---: | :---: |
| Average Ramp Rate ( $\mathrm{T}_{\text {Smax }}$ to $\mathrm{T}_{\mathrm{P}}$ ) | $3^{\circ} \mathrm{C} /$ second max. |
| Preheat <br> - Temperature Min. (TSmin) <br> - Temperature Max. (TSmax) <br> - Time ( $\mathrm{t}_{\mathrm{smin}}$ to $\mathrm{t}_{\mathrm{smax}}$ ) | $\begin{aligned} & 150{ }^{\circ} \mathrm{C} \\ & 200^{\circ} \mathrm{C} \\ & 60-180 \text { seconds } \end{aligned}$ |
| ```Time Maintained Above - Temperature ( \(\mathrm{T}_{\mathrm{L}}\) ) - Time ( \(\mathrm{t}_{\mathrm{L}}\) )``` | $\begin{aligned} & 217^{\circ} \mathrm{C} \\ & 60-150 \text { seconds } \end{aligned}$ |
| Peak Temperature ( $\mathrm{T}_{\mathrm{p}}$ ) | $260{ }^{\circ} \mathrm{C}+0 /-5^{\circ} \mathrm{C}$ |
| Time within $5^{\circ} \mathrm{C}$ of Actual Peak Temperature ( Tp ) | 20-40 seconds |
| Ramp-Down Rate | $6^{\circ} \mathrm{C} /$ second max. |
| Time $25{ }^{\circ} \mathrm{C}$ to Peak Temperature | 8 minutes max. |

## General Specifications

Inductance Test Frequency ... $1 \mathrm{MHz} / 1 \mathrm{~V}$ Operating Temperature
.............................. $-40^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ (Temperature rise included) Storage Temperature
................................ $50^{\circ} \mathrm{C}$ to $+125^{\circ} \mathrm{C}$ Rated Current
............ Inductance drops $30 \%$ at Isat Temperature Rise ..... $40^{\circ} \mathrm{C}$ at rated Irms Resistance to Soldering Heat....+260 ${ }^{\circ} \mathrm{C}$

## Materials

Core $\qquad$ Iron powder
Terminal. $\qquad$ ....... Ni/Sn Packaging....... 3000 pcs. per 7-inch reel

Product Dimensions


## Recommended Layout



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

## SRP2512 Series - SMD Power Inductors

## \#OURNS

L vs. I Charts





SRP2512-2R2M


## SRP2512 Series - SMD Power Inductors

## FOURNS

## Packaging Specifications



## קOURNS'

Asia-Pacific: Tel: +886-2 2562-4117 • Fax: +886-2 2562-4116
EMEA: Tel: +36 88520390 • Fax: +36 88520211
The Americas: Tel: +1-951 781-5500 • Fax: +1-951 781-5700 www.bourns.com

