

## Wire Wound SMD Power Inductor



### ◆ Features

- 1、Magnetic-resin shielded construction reduces buzz noise to ultra-low levels;
- 2、Metallization on ferrite core results in excellent shock resistance and damage-free durability;
- 3、Closed magnetic circuit design reduces leakage
- 4、Small and low profile inductor;
- 5、Take up less PCB real estate and save more power。



### ◆ Applications

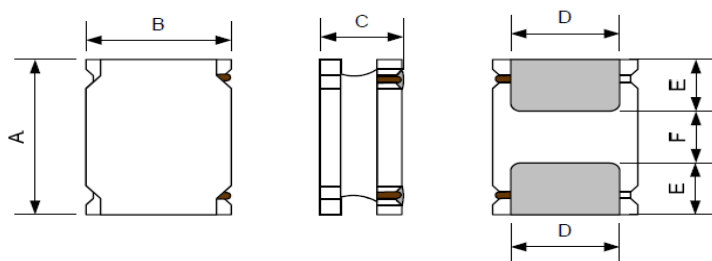
- 1、Smart phone;
- 2、Mobile devices with multifunction such as adding color TV and camera;
- 3、Flat-screen TVs, blue-ray disc recorders, set top boxes;
- 4、Notebooks, desktop computers, servers, graphic cards;
- 5、Portable gaming devices, personal navigation systems, personal multimedia devices;
- 6、Automotive systems;
- 7、Telecomm base stations.

### ◆ Lead Free Part Numbering

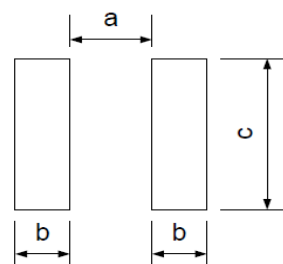
**SLW 252012 P 2R2 M S T**  
**(1) (2) (3) (4) (5) (6) (7)**

- (1) Series Type
- (2) Dimension : L×W×H(2.5×2.0×1.2mm)
- (3) Material Code
- (4) Inductance: 2R2=2.2μH ;  
100=10μH; 101=100μH
- (5) Inductance Tolerance: M=±20%, N=±30%
- (6) Company Code
- (7) Packaging : Tape Carrier Package

### ◆ Dimensions



Recommended Land Pattern



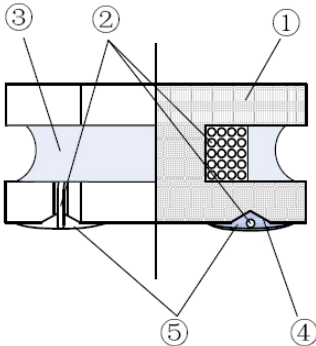
Unit:mm

| Series     | A       | B       | C       | D       | E        | F        | a Typ. | b Typ. | c Typ. |
|------------|---------|---------|---------|---------|----------|----------|--------|--------|--------|
| SLW252012P | 2.5±0.2 | 2.0±0.2 | 1.2Max. | 1.5±0.2 | 0.80±0.2 | 0.80±0.2 | 0.80   | 0.85   | 2.0    |

## ◆ Electrical Characteristics

- 1) Operating temperature range (Including self-heating):  $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
- 2) Storage temperature range (packaging conditions):  $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$  and RH 70% (Max.)

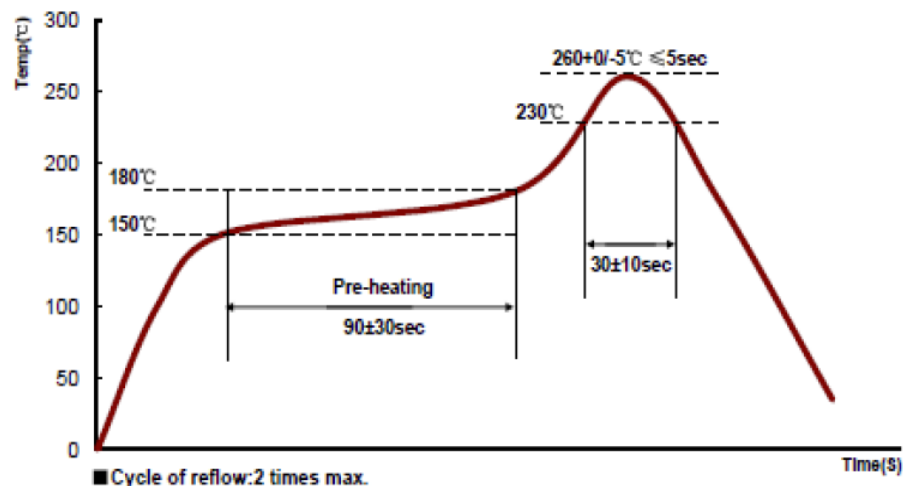
## ◆ Construction and material



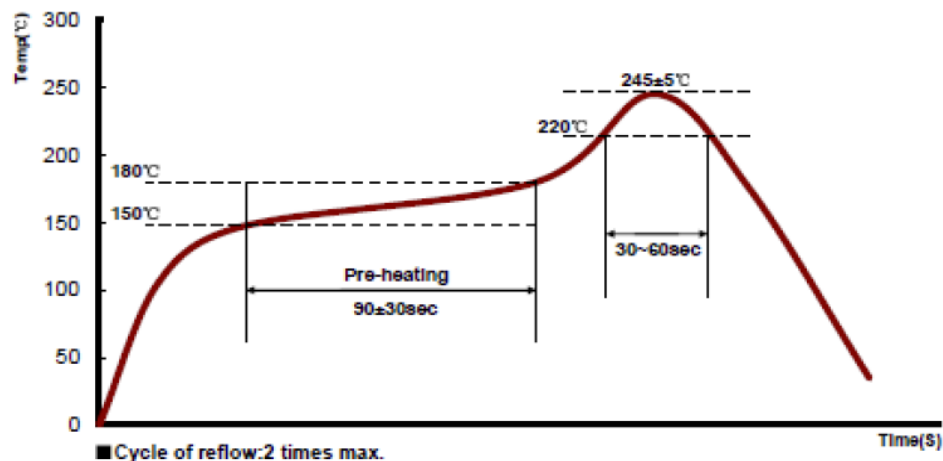
| No. | Components     | Material                                 |
|-----|----------------|--|
| ①   | Core           | Soft magnetic Metal                      |
| ②   | Wire           | Polyurethane system enameled copper wire |
| ③   | Magnetic Glue  | Epoxy resin and magnetic powder          |
| ④   | substrate      | FeNiCu/Ag or Ag/Ni/Sn                    |
| ⑤   | Top Electrodes | Sn alloy                                 |
| ⑥   | Marking        | Nitrocellulose                           |

## ◆ REFLOW-PROFILE

**Limit Profile**



**Standard Profile (for EOC Solder paste S70G-HF)**



## ◆ Specification

| Part Number              | Inductance<br>@100KHz,1V<br>( $\mu\text{H}$ ) | DC Resistance( $\text{m}\Omega$ ) |      | Saturation Current<br>Isat |          | Heat Rating Current<br>Irms |          |
|--------------------------|---|-----------------------------------|------|----------------------------|----------|-----------------------------|----------|
|                          |   | DCR                               |      | Min(A)                     | Typ. (A) | Min(A)                      | Typ. (A) |
|                          |   | Typ.                              | Max. |                            |          |                             |          |
| <b>SLW252012P Series</b> |   |                                   |      |                            |          |                             |          |
| SLW252012PR24MST         | 0.24 $\pm$ 20%                                | 19                                | 23   | 7.00                       | 8.50     | 4.05                        | 4.70     |
| SLW252012PR33MST         | 0.33 $\pm$ 20%                                | 23                                | 28   | 6.00                       | 7.00     | 3.7                         | 4.30     |
| SLW252012PR47MST         | 0.47 $\pm$ 20%                                | 29                                | 35   | 5.10                       | 5.80     | 3.45                        | 4.00     |
| SLW252012PR68MST         | 0.68 $\pm$ 20%                                | 36                                | 43   | 3.90                       | 4.50     | 3.15                        | 3.60     |
| SLW252012P1R0MST         | 1.0 $\pm$ 20%                                 | 48                                | 54   | 3.70                       | 4.30     | 3.0                         | 3.40     |
| SLW252012P1R5MST         | 1.5 $\pm$ 20%                                 | 60                                | 72   | 2.90                       | 3.50     | 2.4                         | 2.80     |
| SLW252012P2R2MST         | 2.2 $\pm$ 20%                                 | 100                               | 120  | 2.60                       | 3.00     | 1.9                         | 2.15     |
| SLW252012P3R3MST         | 3.3 $\pm$ 20%                                 | 136                               | 163  | 1.70                       | 2.10     | 1.8                         | 2.05     |
| SLW252012P4R7MST         | 4.7 $\pm$ 20%                                 | 225                               | 260  | 1.60                       | 1.90     | 1.25                        | 1.45     |
| SLW252012P6R8MST         | 6.8 $\pm$ 20%                                 | 305                               | 366  | 1.15                       | 1.35     | 0.95                        | 1.10     |
| SLW252012P100MST         | 10 $\pm$ 20%                                  | 450                               | 500  | 1.10                       | 1.35     | 0.85                        | 1.00     |

### ◆ Note

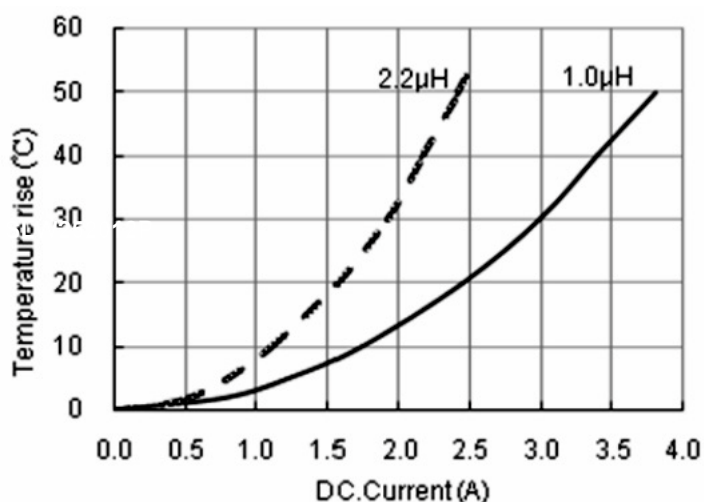
- 1: All test data is referenced to 20°C ambient;
- 2: Rated current: Isat or Irms, whichever is smaller;
- 3: Isat: DC current at which the inductance drops approximate 30% from its value without current;
- 4: Irms: DC current that causes the temperature rise ( $\Delta T = 40^\circ\text{C}$ ) from 20°C ambient.

### ◆ Standard Packing Quantity: 2000 pcs/reel

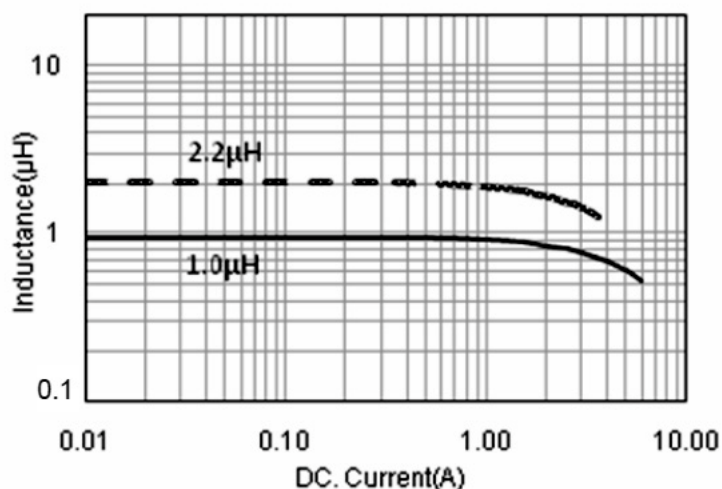
### ◆ TYPICAL ELECTRICAL CHARACTERISTICS

#### SLW252012P Series

Temperature vs.DC Current Characteristics



Inductance vs.DC Current Characteristics



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Fixed Inductors](#) category:*

*Click to view products by [Sunltech](#) manufacturer:*

Other Similar products are found below :

[CR32NP-100KC](#) [CR32NP-151KC](#) [CR32NP-180KC](#) [CR32NP-181KC](#) [CR32NP-1R5MC](#) [CR32NP-390KC](#) [CR32NP-3R9MC](#) [CR32NP-680KC](#) [CR32NP-820KC](#) [CR32NP-8R2MC](#) [CR43NP-390KC](#) [CR43NP-560KC](#) [CR43NP-680KC](#) [CR54NP-181KC](#) [CR54NP-470LC](#) [CR54NP-820KC](#) [CR54NP-8R5MC](#) [70F224AI](#) [MGDQ4-00004-P](#) [MHL1ECTTP18NJ](#) [MHQ1005P10NJ](#) [MHQ1005P1N0S](#) [MHQ1005P2N4S](#) [MHQ1005P3N6S](#) [MHQ1005P5N1S](#) [MHQ1005P8N2J](#) [PE-51506NL](#) [PE-53601NL](#) [PE-53602NL](#) [PE-53630NL](#) [PE-53824SNLT](#) [PE-92100NL](#) [PG0434.801NLT](#) [PG0936.113NLT](#) [9220-20](#) [9310-16](#) [PM06-2N7](#) [PM06-39NJ](#) [A01TK](#) [1206CS-471XJ](#) [HC2LP-R47-R](#) [HC2-R47-R](#) [HC3-2R2-R](#) [HCF1305-3R3-R](#) [1206CS-151XG](#) [RCH664NP-140L](#) [RCH664NP-4R7M](#) [RCH8011NP-221L](#) [RCP1317NP-332L](#) [RCP1317NP-391L](#)