

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

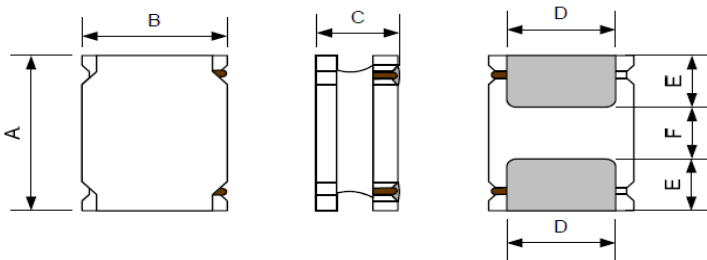
- 1、Smart phone;
- 2、Mobile devices with multifunction such as adding color TV and camera;
- 3、Flat-screen TVs, blue-ray disc recorders, set top boxes;
- 4、Notebooks, desktop computers, servers, graphic cards;
- 5、Portable gaming devices, personal navigation systems, personal multimedia devices;
- 6、Automotive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

◆ Lead Free Part Numbering

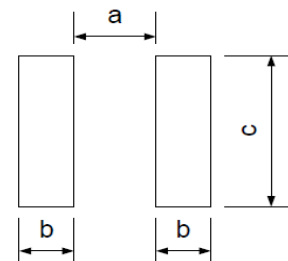
SLW 201610 P 2R2 M S T
(1) (2) (3) (4) (5) (6) (7)

- (1) Series Type
- (2) Dimension : L×W×H(2.0×1.6×1.0mm)
- (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.
SLW201610P	2.0±0.2	1.6±0.2	1.0Max.	1.2±0.2	0.60±0.2	0.80±0.2	0.70	0.70	1.7

◆ 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.)

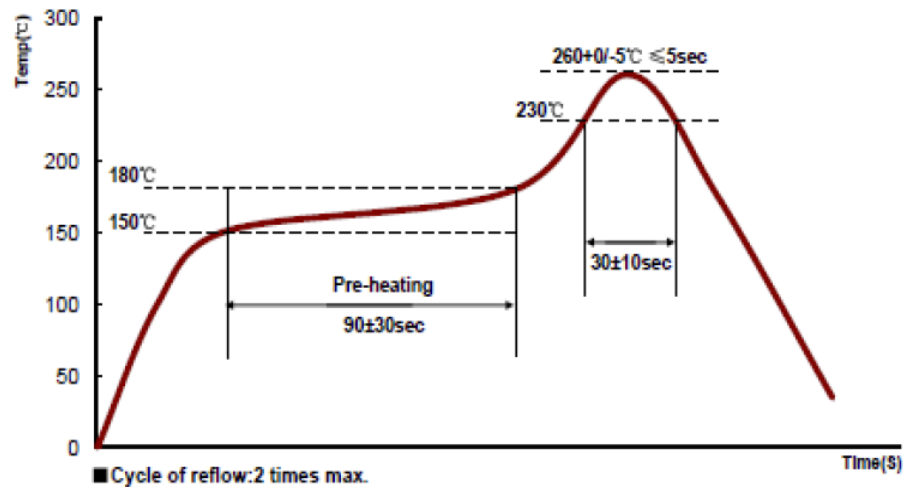
◆ Construction and material



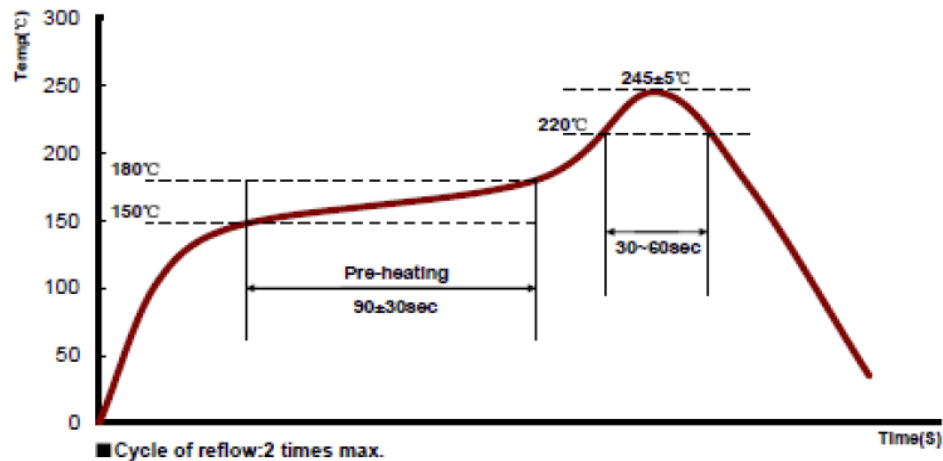
No.	Components	Material
①	Core	Soft magnetic Metal
②	Wire	Polyurethane system enameled copper wire
③	Magnetic Glue	Epoxy resin and magnetic powder
④	substrate	FeNiCu/Ag or Ag/Ni/Sn
⑤	Top Electrodes	Sn alloy
⑥	Marking	Nitrocellulose

◆ REFLOW-PROFILE

Limit Profile



Standard Profile (for EOC Solder paste S70G-HF)



◆ Specification

Part Number	Inductance @100KHz, 1V (μH)	DC Resistance($\text{m}\Omega$)		Saturation Current Isat		Heat Rating Current Irms	
		DCR		Min(A)	Typ. (A)	Min(A)	Typ. (A)
		Typ.	Max.				
SLW201610P Series							
SLW201610PR24MST	0.24 \pm 20%	33.0	40.0	4.50	5.50	3.00	3.45
SLW201610PR47MST	0.47 \pm 20%	41.0	49.0	4.00	4.70	2.70	3.10
SLW201610PR68MST	0.68 \pm 20%	57.0	65.0	3.50	4.00	2.50	2.80
SLW201610P1R0MST	1.0 \pm 20%	75.0	90.0	2.60	2.80	2.05	2.35
SLW201610P1R5MST	1.5 \pm 20%	110	130	1.95	2.30	1.70	2.00
SLW201610P2R2MST	2.2 \pm 20%	142	170	1.90	2.15	1.45	1.70
SLW201610P4R7MST	4.7 \pm 20%	370	425	1.20	1.50	0.90	1.00
SLW201610P100MST	10 \pm 20%	688	826	0.80	0.95	0.65	0.75

◆ Note

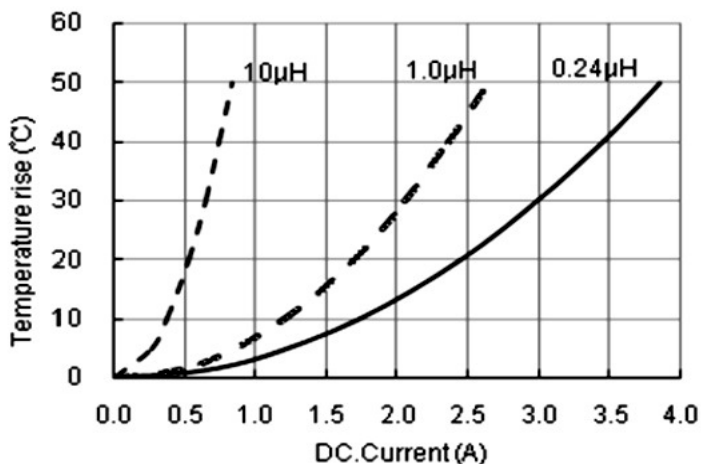
- 1: All test data is referenced to 20°C ambient;
- 2: Rated current: Isat or Irms, whichever is smaller;
- 3: Isat: DC current at which the inductance drops approximate 30% from its value without current;
- 4: Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 20°C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

◆ Standard Packing Quantity: 2000 pcs/reel

◆ TYPICAL ELECTRICAL CHARACTERISTICS

SLW201610P Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

