

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 flux and Electro Magnetic Interference (EMI);
- 4、30% higher current rating than conventional inductors of equal size;
- 5、Take up less PCB real estate and save more power.



◆ Applications

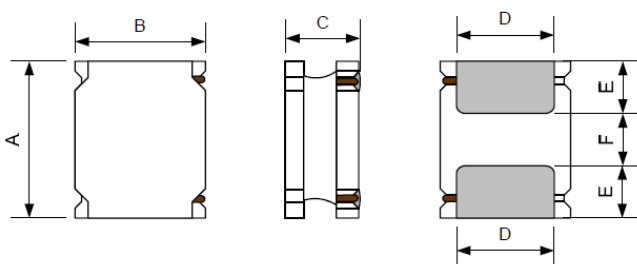
- 1、LED Lighting;
- 2、Mobile devices with multifunction such as adding color TV and camera;
- 3、Flat-screen TVs, blue-ray disc recorders, set top boxes;
- 4、Notebooks, desktop computers, servers, graphic cards;
- 5、Portable gaming devices, personal navigation systems, personal multimedia devices;
- 6、Automotive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

◆ Lead Free Part Numbering

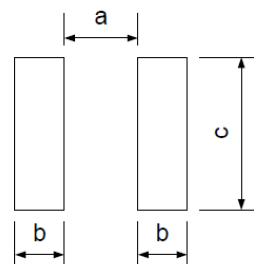
SLW 6010 S 4R7 M S T
(1) (2) (3) (4) (5) (6) (7)

- (1) Series Type
- (2) Dimension: L X H
- (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



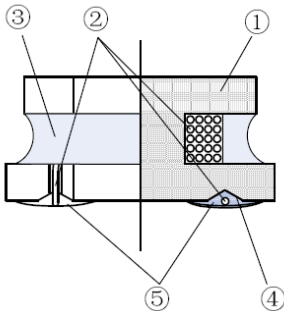
Unit:mm

Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
SLW6010S	6.0±0.3	6.0±0.3	1.0Max.	4.9±0.3	1.55±0.3	2.90±0.3	2.8	1.7	5.7

◆ 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.)

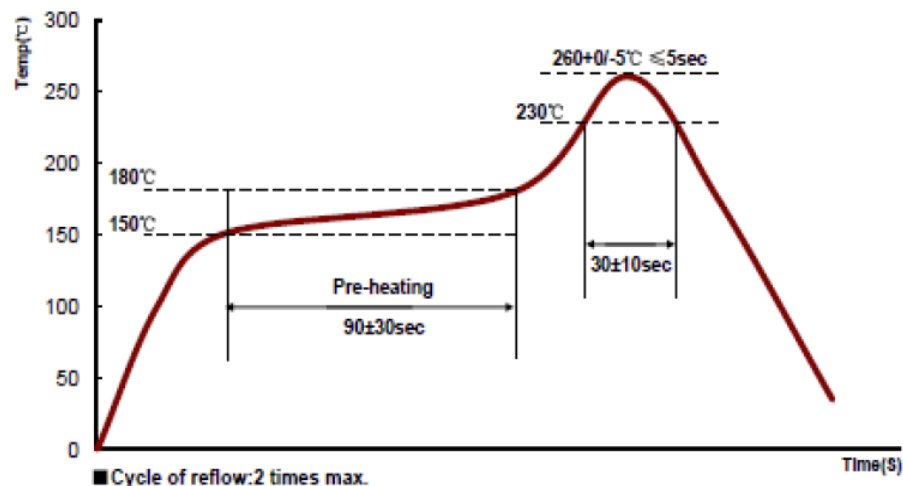
◆ Construction and material



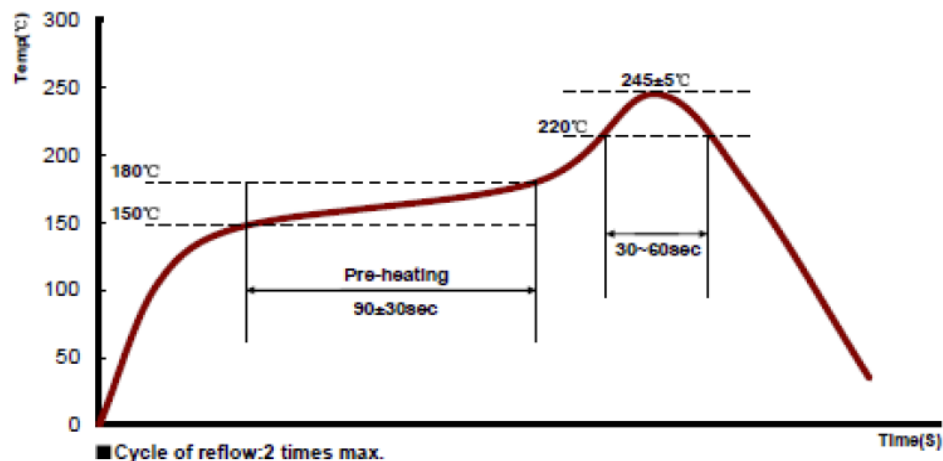
Code	Part Name	Material Name
①	Ferrite Core	Ni-Zn Ferrite
②	Wire	Polyurethane system enameled copper wire
③	Magnetic Glue	Epoxy resin and magnetic powder
④	Plating Electrodes	Ag
		Ni
		Sn
⑤	Outer Electrodes	Top surface solder coating Sn、Ag、Cu

◆ REFLOW-PROFILE

Limit Profile



Standard Profile (for EOC Solder paste S70G-HF)



◆ Specification

Part Number	Inductance @100KHz, 1V (μ H)	DC Resistance $\pm 30\%$ (Ω)	Min. Self-resonant Frequency (MHz)	Saturation Current(A)	Heat Rating Current (A)
		DCR	S.R.F	I_{sat}	I_{rms}
SLW6010S Series					
SLW6010S2R2MST	2.2 \pm 20%	0.119	61	2.60	2.00
SLW6010S3R3MST	3.3 \pm 20%	0.174	56	2.00	1.70
SLW6010S4R7MST	4.7 \pm 20%	0.217	51	1.75	1.45
SLW6010S6R8MST	6.8 \pm 20%	0.298	46	1.20	1.22
SLW6010S100MST	10 \pm 20%	0.357	44	1.10	1.20
SLW6010S150MST	15 \pm 20%	0.570	41	0.90	0.80
SLW6010S220MST	22 \pm 20%	0.884	36	0.70	0.60

◆ Note

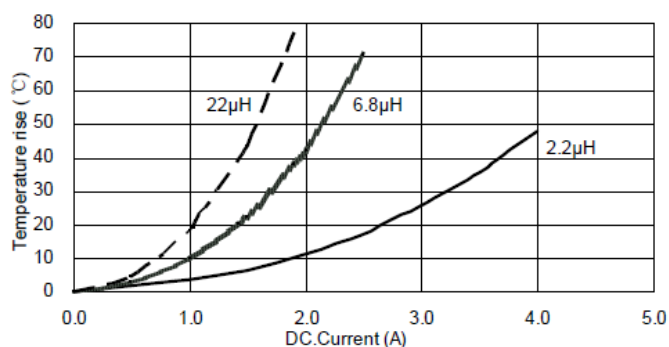
- 1: All test data is referenced to 20°C ambient;
- 2: Rated current: I_{sat} or I_{rms} , whichever is smaller;
- 3: I_{sat} : DC current at which the inductance drops approximate 30% from its value without current;
- 4: I_{rms} : DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$)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

◆ Standard Packing Quantity: 2000 pcs/reel

◆ TYPICAL ELECTRICAL CHARACTERISTICS

SLW6010S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

