SLW6040S Series

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

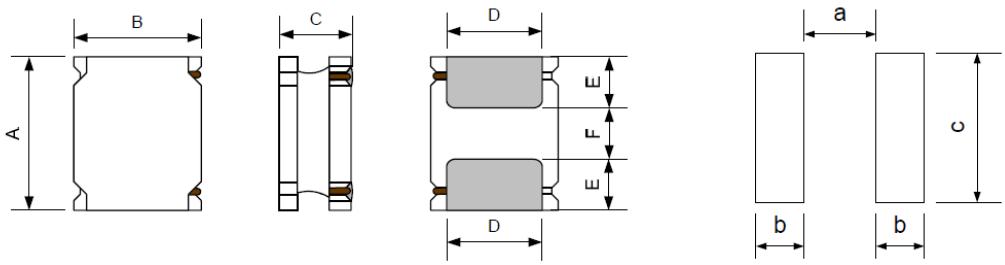
◆ Lead Free Part Numbering

SLW	6040	S	100	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



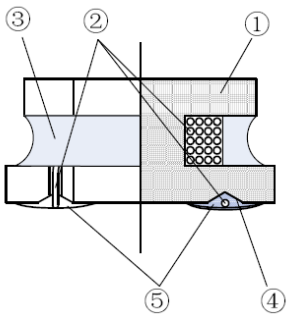
Unit:mm

Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
SLW6040S	6.0±0.3	6.0±0.3	4.0Max.	4.9±0.3	1.55±0.3	2.90±0.3	2.8	1.7	5.7

◆ Electrical Characteristics

1) Operating and storage temperature range (individual chip without packing): cking): -25℃ ~ +125℃
2) Storage temperature range (packaging conditions): -10℃~+40℃ and RH 70% (Max.)

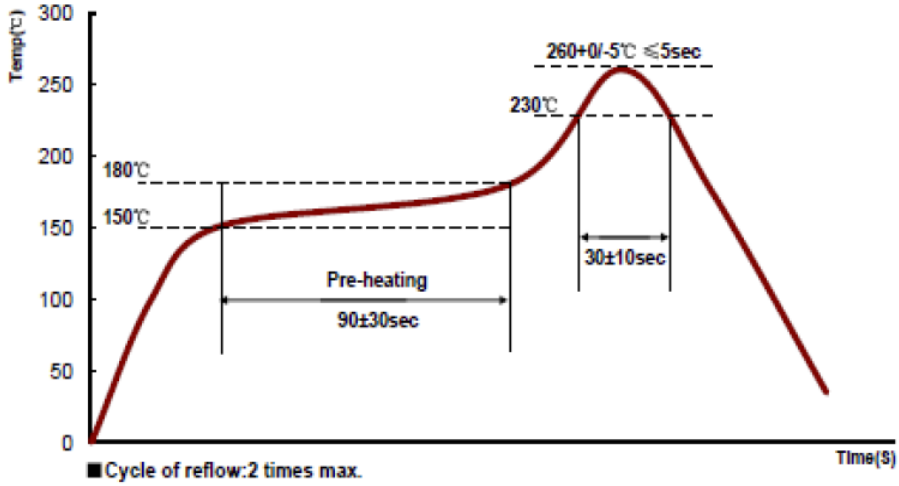
◆ Construction and material



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

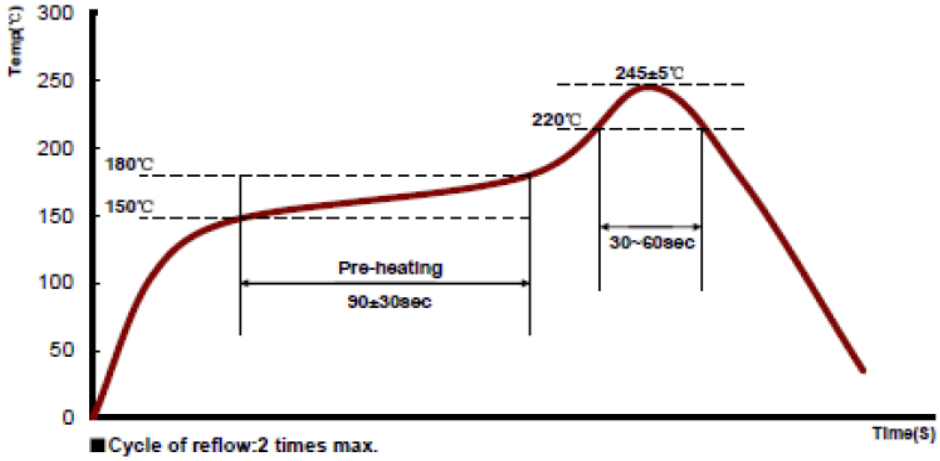
◆ REFLOW-PROFILE

Limit Profile



■Cycle of reflow:2 times max.

Standard Profile (for EOC Solder paste S70G-HF)



■Cycle of reflow:2 times max.

◆ Specification

Part Number	Inductance @100KHz,1 V (μH)	DC Resistance ±30% (Ω) DCR	Min.Self-resonant Frequency（MHz） S.R.F	Saturation Current(A) Isat	Heat Rating Current (A) Irms
SLW6040S Series					
SLW6040S1R0NST	1.0±30%	0.011	100	9.65	5.04
SLW6040S1R5NST	1.5±30%	0.012	65	8.60	4.85
SLW6040S2R2MST	2.2±20%	0.014	52	6.55	4.50
SLW6040S3R3MST	3.3±20%	0.021	32	5.70	3.60
SLW6040S4R7MST	4.7±20%	0.026	24	4.80	3.25
SLW6040S6R8MST	6.8±20%	0.031	20	3.70	2.90
SLW6040S100MST	10±20%	0.048	15	3.00	2.35
SLW6040S150MST	15±20%	0.068	12	2.30	1.95
SLW6040S220MST	22±20%	0.089	10	1.85	1.70
SLW6040S330MST	33±20%	0.137	7.8	1.45	1.35
SLW6040S470MST	47±20%	0.200	6.4	1.20	1.10
SLW6040S560MST	56±20%	0.221	6.4	1.10	1.00
SLW6040S680MST	68±20%	0.289	6.4	1.00	0.90
SLW6040S820MST	82±20%	0.341	4.9	0.85	0.80
SLW6040S101MST	100±20%	0.433	4.2	0.75	0.70

◆ 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;

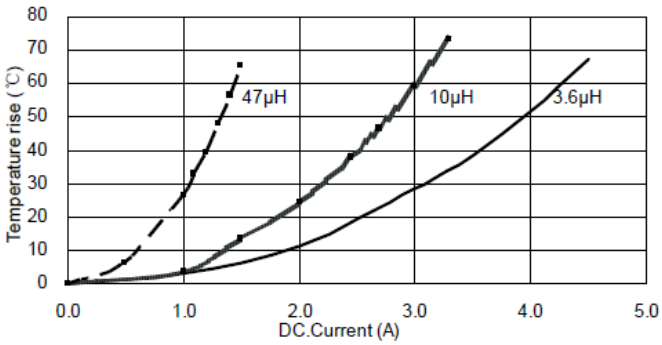
4：Irms: DC current that causes the temperature rise (△T =40°C) from 20°C ambient.

◆ Standard Packing Quantity：1500 pcs/reel

◆ TYPICAL ELECTRICAL CHARACTERISTICS

SLW6040S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics