

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

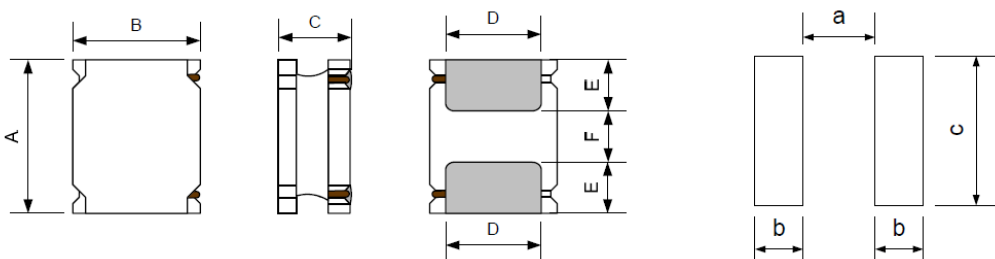
◆ Lead Free Part Numbering

SLW 5040 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=2.2 μ H ;
100=10 μ H; 101=100 μ H
- (5) Inductance Tolerance: M=±20%, N=±30%
- (6) Company Code
- (7) Packaging : Tape Carrier Package

◆ Dimensions

Recommended Land Pattern



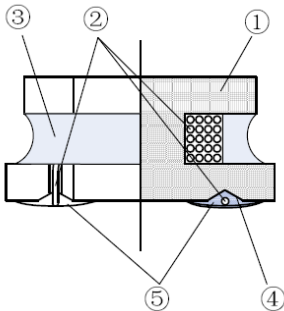
Unit:mm

Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
SLW5040S	5.0±0.2	5.0±0.2	4.0Max.	4.0±0.2	1.25±0.2	2.50±0.2	2.1	1.5	4.4

◆ 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.)

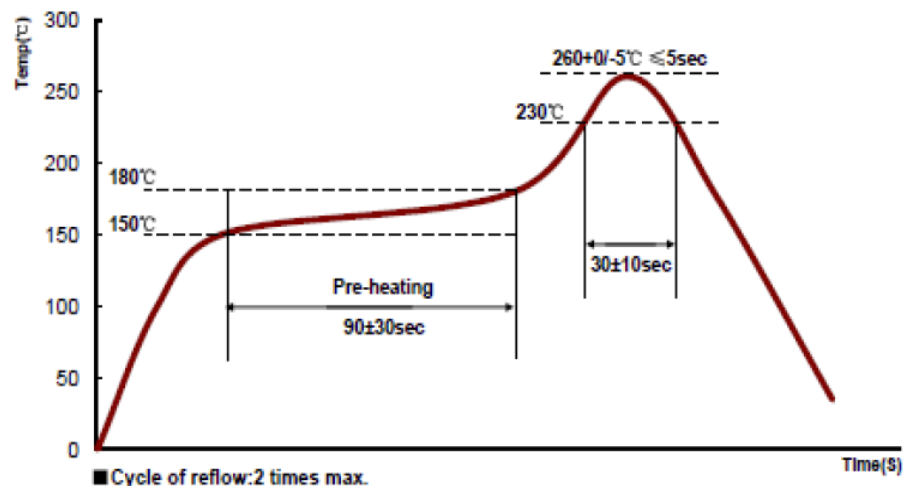
◆ Construction and material



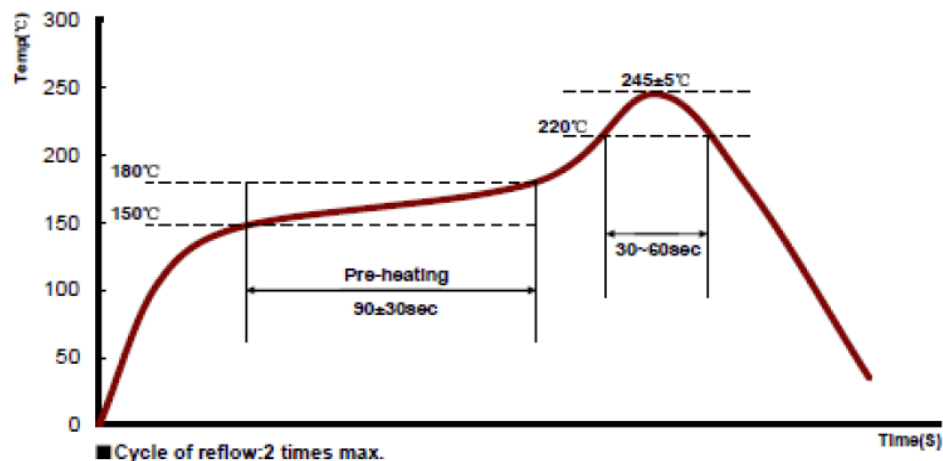
Code	Part Name	Material Name
①	Ferrite Core	Ni-Zn Ferrite
②	Wire	Polyurethane system enameled copper wire
③	Magnetic Glue	Epoxy resin and magnetic powder
④	Plating Electrodes	Ag
		Ni
		Sn
⑤	Outer Electrodes	Top surface solder coating Sn、Ag、Cu

◆ 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	Isat	Irms
SLW5040 Series					
SLW5040S1R0MST	1.0 $\pm 20\%$	0.012	117	7.35	4.90
SLW5040S1R5MST	1.5 $\pm 20\%$	0.013	86	7.30	4.45
SLW5040S2R2MST	2.2 $\pm 20\%$	0.017	42	6.50	3.95
SLW5040S3R3MST	3.3 $\pm 20\%$	0.025	32	5.10	3.40
SLW5040S4R7MST	4.7 $\pm 20\%$	0.029	28	4.40	3.10
SLW5040S6R8MST	6.8 $\pm 20\%$	0.043	21	3.80	2.40
SLW5040S100MST	10 $\pm 20\%$	0.055	18	2.90	2.10
SLW5040S150MST	15 $\pm 20\%$	0.089	13	2.30	1.60
SLW5040S220MST	22 $\pm 20\%$	0.126	9	1.90	1.40
SLW5040S330MST	33 $\pm 20\%$	0.192	7	1.60	1.20
SLW5040S470MST	47 $\pm 20\%$	0.283	6	1.30	0.94
SLW5040S680MST	68 $\pm 20\%$	0.520	5	1.10	0.90
SLW5040S101MST	100 $\pm 20\%$	0.728	4	0.80	0.75
SLW5040S151MST	150 $\pm 20\%$	0.915	2	0.60	0.50

◆ Note

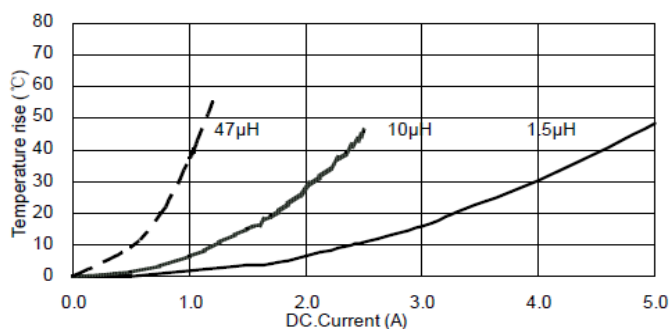
- 1: All test data is referenced to 20°C ambient;
- 2: Rated current: Isat or Irms, whichever is smaller;
- 3: Isat: DC current at which the inductance drops approximate 30% from its value without current;
- 4: Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 20°C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

◆ Standard Packing Quantity: 1500 pcs/reel

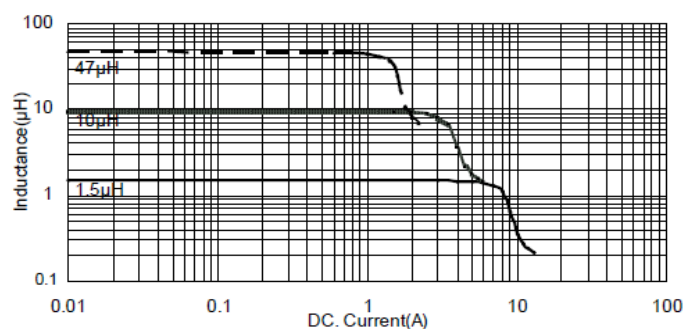
◆ TYPICAL ELECTRICAL CHARACTERISTICS

SLW5040S 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](#)