

**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.

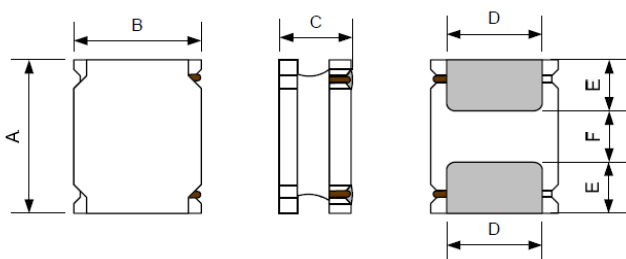

**◆ Applications**

- 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

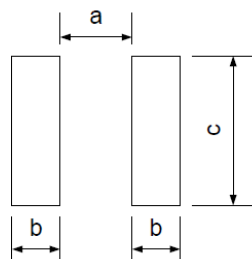
**◆ Lead Free Part Numbering**

**SLW 8040 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 $\mu$ H ;  
100=10 $\mu$ H; 101=100 $\mu$ H
- (5) Inductance Tolerance: M= $\pm$ 20%, N= $\pm$ 30%
- (6) Company Code
- (7) Packaging : Tape Carrier Package

**◆ Dimensions**


Recommended Land Pattern



Unit:mm

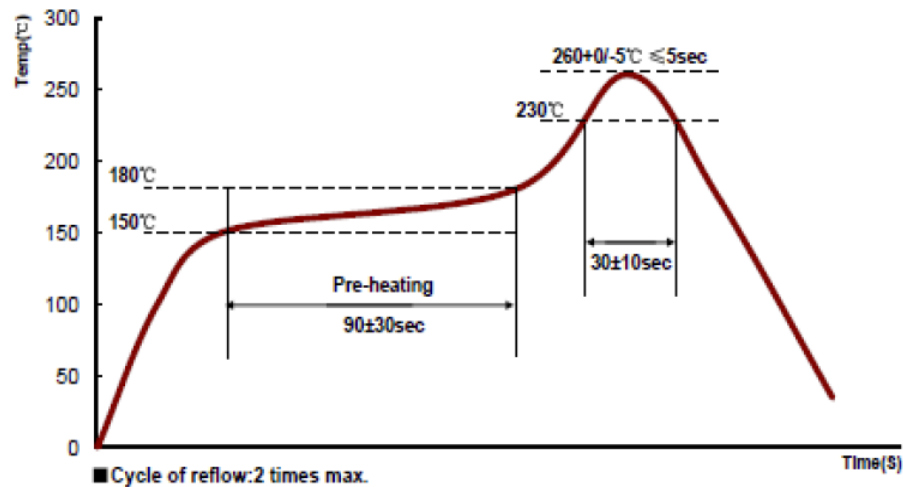
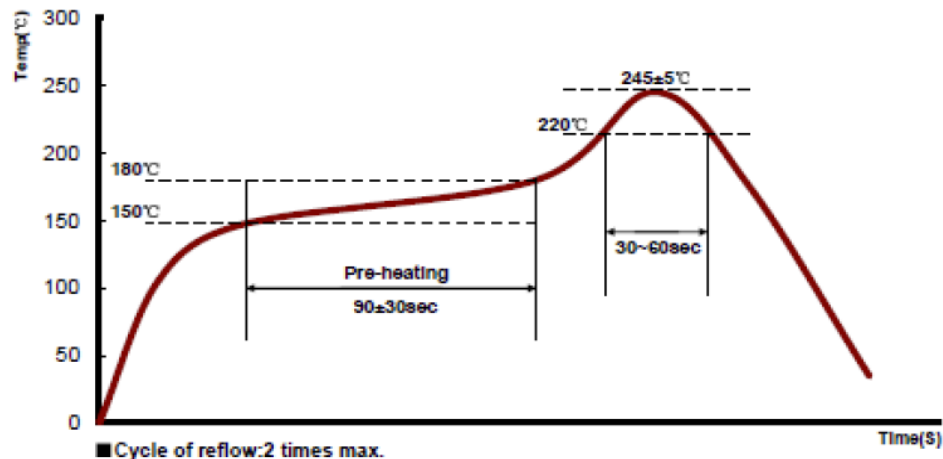
Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
SLW8040S	8.0 $\pm$ 0.3	8.0 $\pm$ 0.3	4.2Max.	6.3 $\pm$ 0.3	2.00 $\pm$ 0.3	4.00 $\pm$ 0.3	3.8	2.2	7.5

**◆ 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 ( $\mu$ H)	DC Resistance $\pm 30\%$ ( $\Omega$ )	Min.Self-resonant Frequency (MHz)	Saturation Current(A)	Heat Rating Current (A)
		DCR	S.R.F	Isat	Irms
<b>SLW8040S Series</b>					
SLW8040SR82NST	0.82 $\pm$ 30%	0.008	94	13.80	6.30
SLW8040S1R0MST	1.0 $\pm$ 20%	0.008	89	9.85	6.30
SLW8040S1R5NST	1.5 $\pm$ 30%	0.010	67	8.15	5.65
SLW8040S2R2MST	2.2 $\pm$ 20%	0.012	41	7.10	5.15
SLW8040S3R3MST	3.3 $\pm$ 20%	0.017	27	6.50	4.40
SLW8040S4R7MST	4.7 $\pm$ 20%	0.019	24	5.90	4.10
SLW8040S5R6MST	5.6 $\pm$ 20%	0.021	24	6.00	3.85
SLW8040S6R8MST	6.8 $\pm$ 20%	0.024	20	4.55	3.60
SLW8040S8R2MST	8.2 $\pm$ 20%	0.026	17	4.20	3.45
SLW8040S100MST	10 $\pm$ 20%	0.029	15	3.60	3.30
SLW8040S120MST	12 $\pm$ 20%	0.041	13	3.50	2.80
SLW8040S150MST	15 $\pm$ 20%	0.047	12	2.95	2.60
SLW8040S220MST	22 $\pm$ 20%	0.069	9.5	2.40	2.10
SLW8040S330MST	33 $\pm$ 20%	0.097	7.8	2.05	1.80
CMLW8040S470MST	47 $\pm$ 20%	0.136	6.4	1.75	1.55
SLW8040S560MST	56 $\pm$ 20%	0.148	6.4	1.55	1.45
SLW8040S680MST	68 $\pm$ 20%	0.196	4.9	1.45	1.25
SLW8040S101MST	100 $\pm$ 20%	0.290	4.2	1.15	1.00
SLW8040S121MST	120 $\pm$ 20%	0.334	3.5	1.05	0.95
SLW8040S151MST	150 $\pm$ 20%	0.410	3.5	1.10	0.85
SLW8040S221MST	220 $\pm$ 20%	0.599	3.5	0.85	0.80
SLW8040S331MST	330 $\pm$ 20%	0.889	2.8	0.68	0.64

**◆ Note**

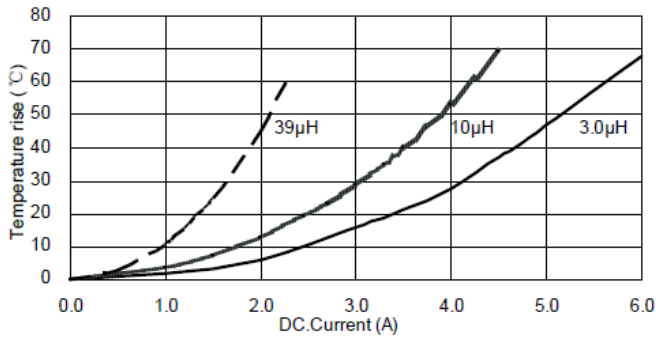
- 1: All test data is referenced to 20°C ambient;
- 2: Rated current: Isat or Irms, whichever is smaller;
- 3: Isat: DC current at which the inductance drops approximate 30% from its value without current;
- 4: Irms: DC current that causes the temperature rise ( $\Delta T = 40^\circ\text{C}$ ) from 20°C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

**◆ Standard Packing Quantity: 1000 pcs/reel**

◆ **TYPICAL ELECTRICAL CHARACTERISTICS**

**SLW8040S Series**

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

