SLW8040S 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

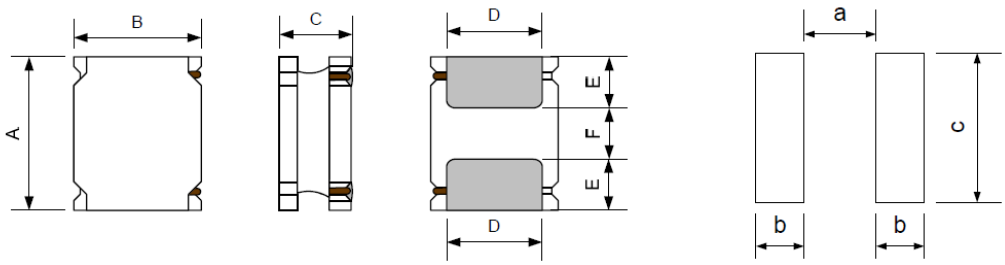
◆ Lead Free Part Numbering

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

◆ Dimensions

Recommended Land Pattern



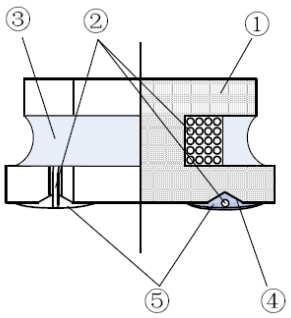
Unit:mm

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

◆ Electrical Characteristics

1) Operating temperature range（Including self-heating)：-40℃ ~ +125℃
2) Storage temperature range (packaging conditions): -10℃~+40℃ and RH 70% (Max.)

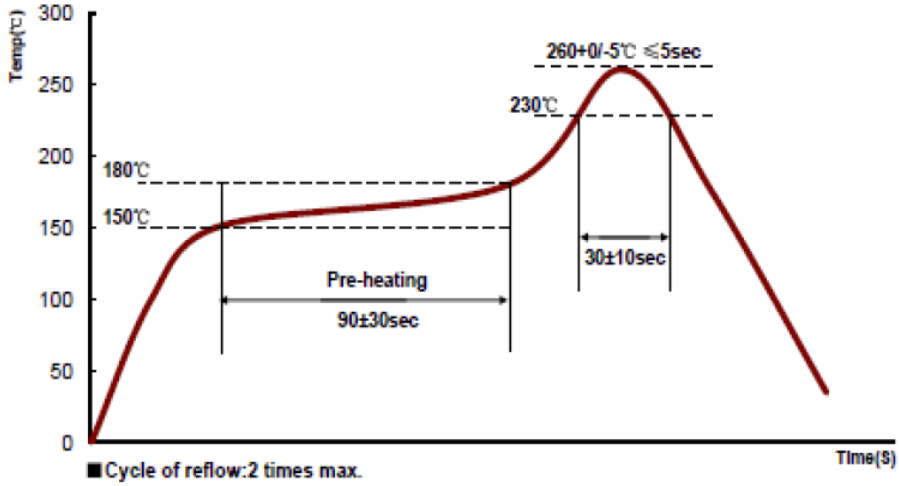
◆ Construction and material



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

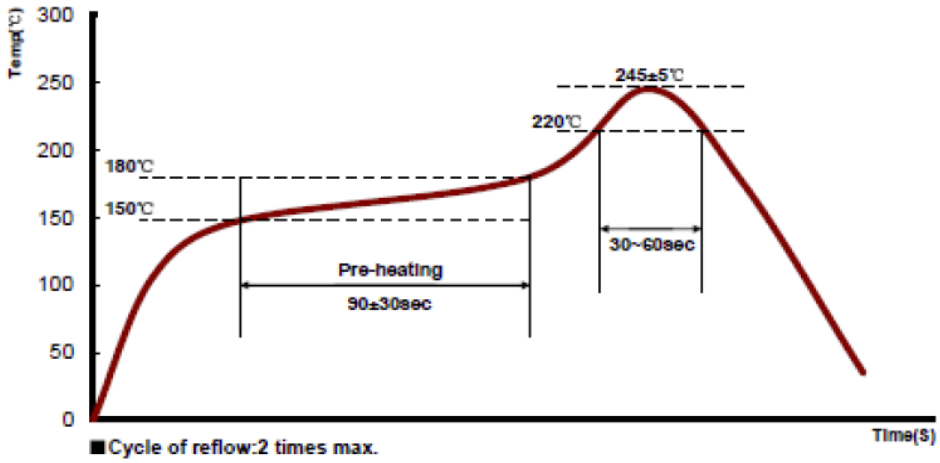
◆ REFLOW-PROFILE

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,1V (μH)	DC Resistance ±30% (Ω) DCR	Min.Self-resonant Frequency（MHz） S.R.F	Saturation Current(A) Isat	Heat Rating Current (A) Irms
SLW8040S Series					
SLW8040SR82NST	0.82±30%	0.008	94	13.80	6.30
SLW8040S1R0MST	1.0±20%	0.008	89	9.85	6.30
SLW8040S1R5NST	1.5±30%	0.010	67	8.15	5.65
SLW8040S2R2MST	2.2±20%	0.012	41	7.10	5.15
SLW8040S3R3MST	3.3±20%	0.017	27	6.50	4.40
SLW8040S4R7MST	4.7±20%	0.019	24	5.90	4.10
SLW8040S5R6MST	5.6±20%	0.021	24	6.00	3.85
SLW8040S6R8MST	6.8±20%	0.024	20	4.55	3.60
SLW8040S8R2MST	8.2±20%	0.026	17	4.20	3.45
SLW8040S100MST	10±20%	0.029	15	3.60	3.30
SLW8040S120MST	12±20%	0.041	13	3.50	2.80
SLW8040S150MST	15±20%	0.047	12	2.95	2.60
SLW8040S220MST	22±20%	0.069	9.5	2.40	2.10
SLW8040S330MST	33±20%	0.097	7.8	2.05	1.80
SLW8040S470MST	47±20%	0.136	6.4	1.75	1.55
SLW8040S560MST	56±20%	0.148	6.4	1.55	1.45
SLW8040S680MST	68±20%	0.196	4.9	1.45	1.25
SLW8040S820MST	82±20%	0.263	4.6	1.40	1.20
SLW8040S101MST	100±20%	0.290	4.2	1.15	1.00
SLW8040S121MST	120±20%	0.334	3.5	1.05	0.95
SLW8040S151MST	150±20%	0.410	3.5	1.10	0.85
SLW8040S221MST	220±20%	0.599	3.5	0.85	0.80
SLW8040S331MST	330±20%	0.889	2.8	0.68	0.64
SLW8040S471MST	470±20%	1.260	2.7	0.70	0.60
SLW8040S681MST	680±20%	2.040	2.6	0.60	0.50
SLW8040S102MST	1000±20%	2.800	2.2	0.45	0.40

◆ 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;

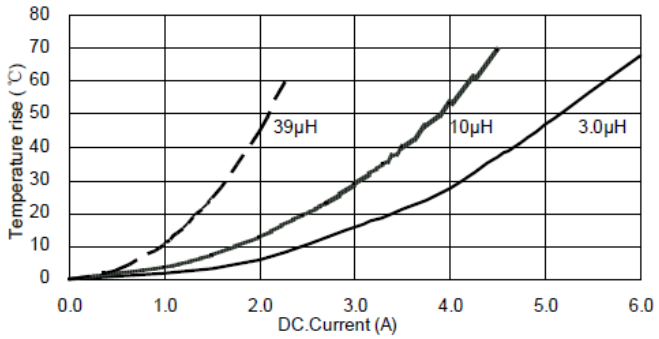
4：Irms: DC current that causes the temperature rise (△ T =40°C) from 20°C ambient.

◆ Standard Packing Quantity：1000 pcs/reel

◆ TYPICAL ELECTRICAL CHARACTERISTICS

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Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

