SLW4030S 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

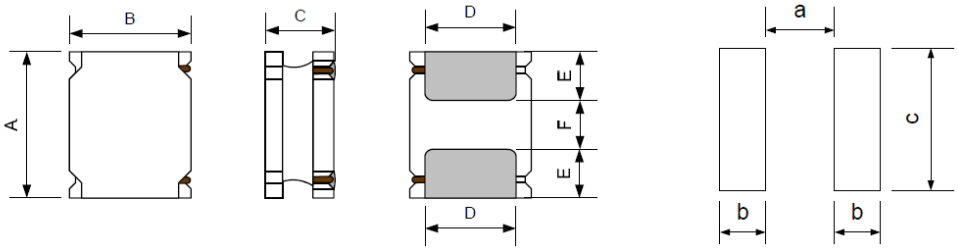
◆ Lead Free Part Numbering

SLW	4030	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



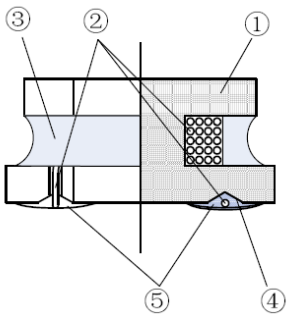
Unit:mm

Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
SLW4030S	4.0±0.2	4.0±0.2	3.0Max.	3.3±0.2	0.95±0.2	2.10±0.2	1.9	1.1	3.7

◆ Electrical Characteristics

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

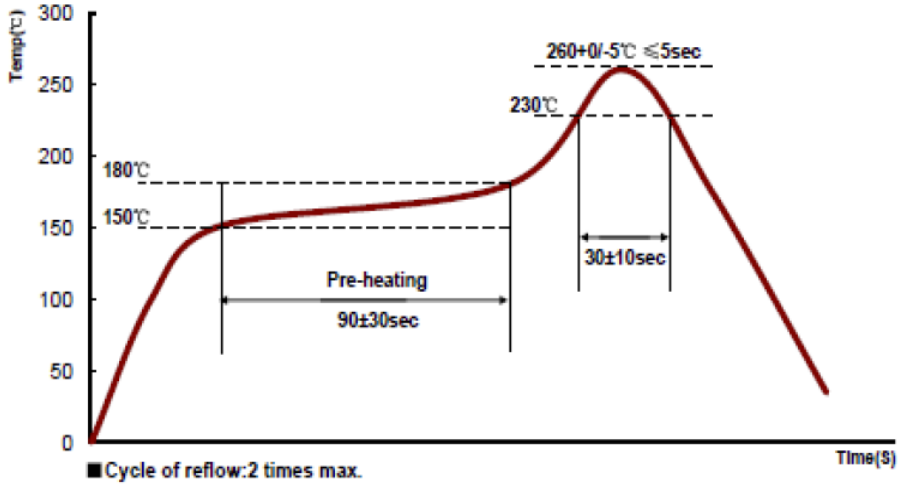
◆ Construction and material



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

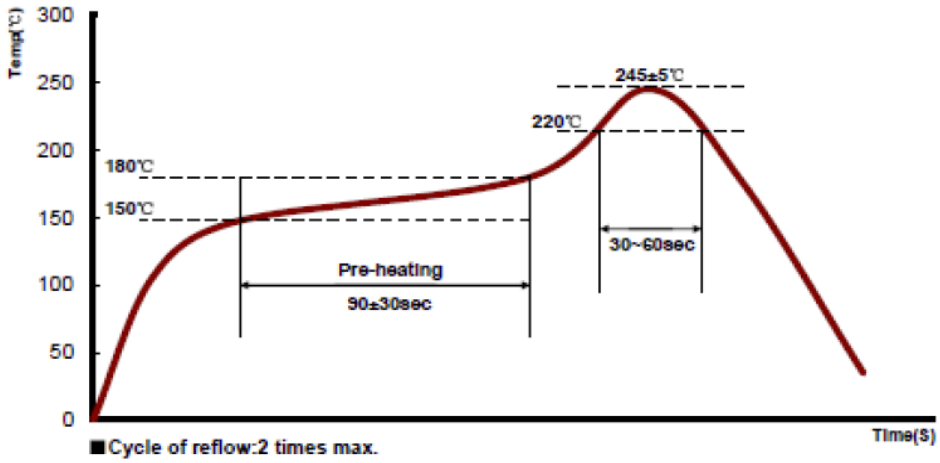
◆ REFLOW-PROFILE

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
SLW4030S Series					
SLW4030SR68NST	0.68±30%	0.010	130	6.80	4.56
SLW4030S1R0NST	1.0±30%	0.014	70	5.26	4.15
SLW4030S1R5MST	1.5±20%	0.020	62	5.14	3.34
SLW4030S2R2MST	2.2±20%	0.030	52	4.90	2.95
SLW4030S3R3MST	3.3±20%	0.040	38	3.30	2.40
SLW4030S3R9MST	3.9±20%	0.074	35	3.00	2.10
SLW4030S4R7MST	4.7±20%	0.060	31	2.90	2.00
SLW4030S5R6MST	5.6±20%	0.065	30	2.60	1.95
SLW4030S6R8MST	6.8±20%	0.090	24	2.75	1.60
SLW4030S100MST	10±20%	0.100	21	1.95	1.50
SLW4030S120MST	12±20%	0.135	18	1.70	1.30
SLW4030S150MST	15±20%	0.190	16	1.65	1.11
SLW4030S180MST	18±20%	0.200	10	1.40	1.10
SLW4030S220MST	22±20%	0.225	10	1.30	1.00
SLW4030S330MST	33±20%	0.330	10	1.10	0.84
SLW4030S470MST	47±20%	0.445	8.4	0.95	0.72
SLW4030S560MST	56±20%	0.555	8.4	0.85	0.65
SLW4030S680MST	68±20%	0.868	7	0.72	0.52
SLW4030S750MST	75±20%	1.020	6.3	0.70	0.48
SLW4030S820MST	82±20%	1.060	5.6	0.66	0.47
SLW4030S101MST	100±20%	1.150	5.6	0.60	0.45
SLW4030S121MST	120±20%	1.350	5.4	0.55	0.42
SLW4030S151MST	150±20%	1.800	4	0.50	0.30
SLW4030S471MST	330±20%	5.500	3	0.30	0.25
SLW4030S471MST	470±20%	7.200	2	0.30	0.20
SLW4030S681MST	680±20%	7.580	1.2	0.19	0.14

◆ Note

1：All test data is referenced to 20°C ambient;

2：Rated current: Isat or Irms, whichever is smaller;

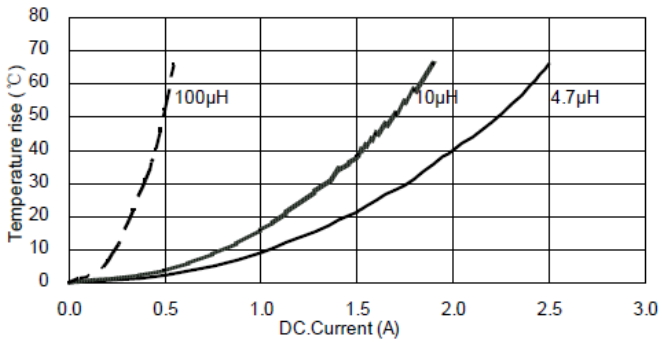
3：Isat: DC current at which the inductance drops approximate 30% from its value without current;

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

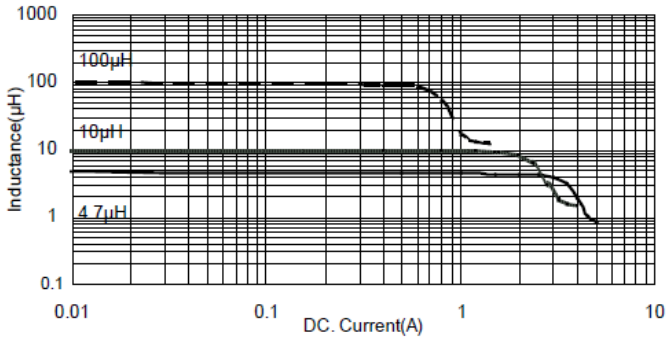
◆ TYPICAL ELECTRICAL CHARACTERISTICS

SLW4030 Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



◆ **Standard Packing Quantity：2000 pcs/reel**