SLW6020S 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

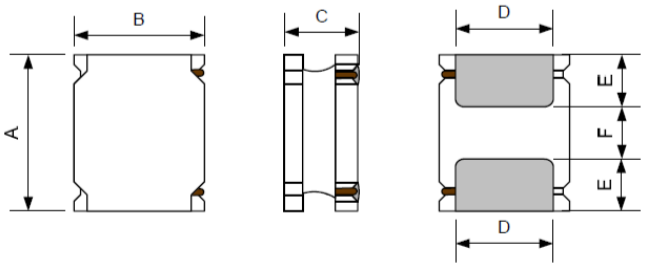
1、LED Lighting；
2、Mobile devices with multifunction such as adding color TV and camera；
3、Flat-screen TVs, blue-ray disc recorders, set top boxes；
4、Notebooks, desktop computers, servers, graphic cards；
5、Portable gaming devices, personal navigation systems, personal multimedia devices；
6、Automotive systems
7、Telecomm base stations

◆ Lead Free Part Numbering

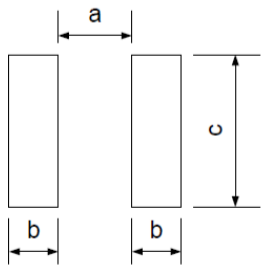
SLW	6020	S	100	M	S	T
(1)	(2)	(3)	(4)	(5)	(6)	(7)

(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



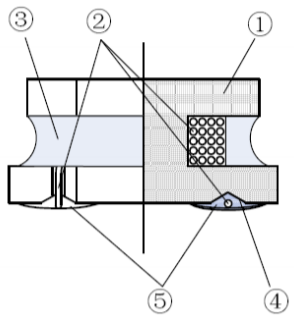
Unit:mm

Series	A	B	C	D	E	F	a Typ.	b Typ.	c Typ.
SLW6020S	6.0±0.3	6.0±0.3	2.0Max.	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.)

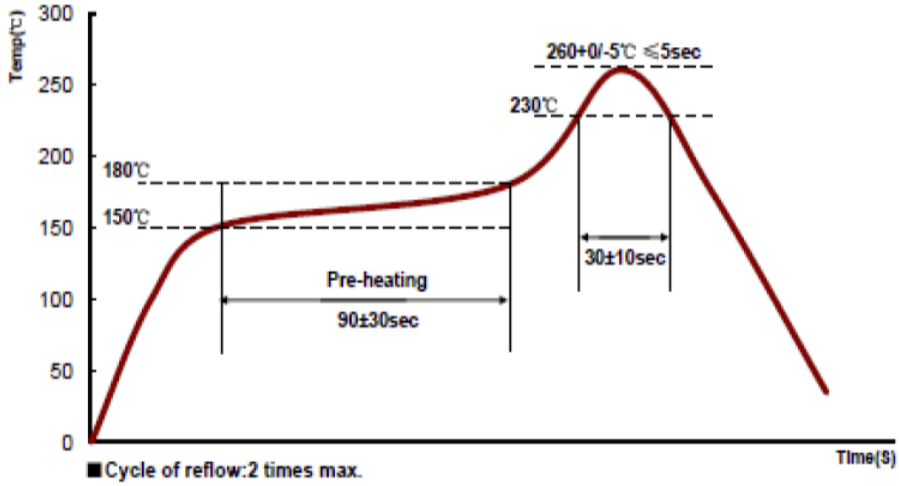
◆ Construction and material



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

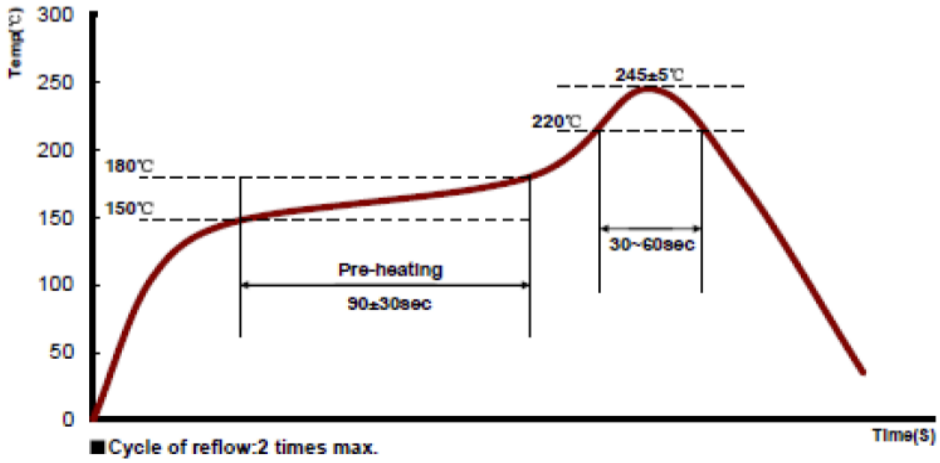
◆ REFLOW-PROFILE

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,1V (μH)	DC Resistance ±30% (Ω) DCR	Min.Self-resonant Frequency（MHz） S.R.F	Saturation Current(A) Isat	Heat Rating Current (A) Irms
SLW6020S Series					
SLW6020SR68NST	0.68±30%	0.017	120	7.50	3.80
SLW6020S1R0NST	1.0±30%	0.020	94	4.15	3.25
SLW6020S1R5NST	1.5±30%	0.022	79	4.25	3.20
SLW6020S2R2NST	2.2±30%	0.028	61	3.75	2.75
SLW6020S3R3NST	3.3±30%	0.035	51	3.15	2.60
SLW6020S4R7NST	4.7±30%	0.058	41	3.00	2.00
SLW6020S5R6NST	5.6±30%	0.058	36	2.40	1.90
SLW6020S6R8NST	6.8±30%	0.079	31	2.20	1.80
SLW6020S8R2NST	8.2±20%	0.105	28	2.10	1.40
SLW6020S100MST	10±20%	0.105	27	1.75	1.40
SLW6020S150MST	15±20%	0.145	21	1.50	1.20
SLW6020S220MST	22±20%	0.204	16	1.25	1.00
SLW6020S330MST	33±20%	0.300	11	0.96	0.85
SLW6020S470MST	47±20%	0.410	10	0.70	0.80
SLW6020S680MST	68±20%	0.825	9	0.65	0.75
SLW6020S101MST	100±20%	1.375	8	0.50	0.35

◆ 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;

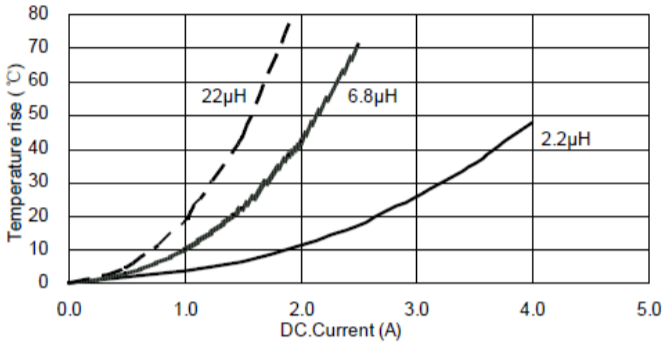
4：Irms: DC current that causes the temperature rise (△ T =40°C) from 20°C ambient.

◆ Standard Packing Quantity：2500 pcs/reel

◆ TYPICAL ELECTRICAL CHARACTERISTICS

SLW6020S Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

