

## 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

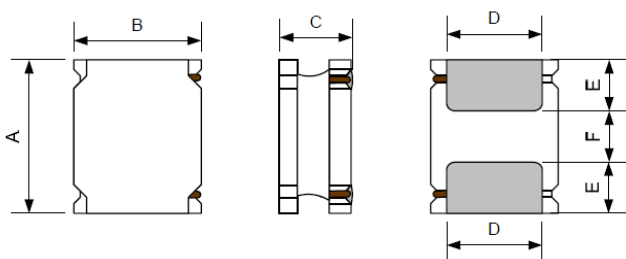
- 1、LED Lighting;
- 2、Mobile devices with multifunction such as adding color TV and camera;
- 3、Flat-screen TVs, blue-ray disc recorders, set top boxes;
- 4、Notebooks, desktop computers, servers, graphic cards;
- 5、Portable gaming devices, personal navigation systems, personal multimedia devices;
- 6、Automotive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

### ◆ Lead Free Part Numbering

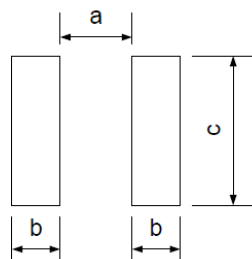
**SLW 3012 S 100 M S T**  
**(1) (2) (3) (4) (5) (6) (7)**

- (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.
SLW3012	3.0±0.2	3.0±0.2	1.2Max.	2.5±0.2	0.75±0.2	1.50±0.2	1.5	0.8	2.7

## ◆ Specification

Part Number	Inductance @100KHz, 1V (μH)	DC Resistance ±30% (Ω)	Min.Self-resonant Frequency (MHz)	Saturation Current(A)	Heat Rating Current (A)
		DCR	S.R.F	Isat	Irms
<b>SLW3012 Series</b>					
SLW3012SR82NST	0.82±30%	0.027	180	2.47	2.84
SLW3012S1R0NST	1.0±30%	0.036	120	2.25	2.53
SLW3012S1R2NST	1.2±30%	0.040	120	2.68	2.31
SLW3012S1R5NST	1.5±30%	0.040	110	1.96	2.31
SLW3012S1R8NST	1.8±30%	0.049	90	1.83	2.12
SLW3012S2R2NST	2.2±30%	0.067	84	1.45	1.78
SLW3012S2R4NST	2.4±30%	0.061	100	1.39	1.73
SLW3012S2R7NST	2.7±30%	0.076	65	1.38	1.70
SLW3012S3R3MST	3.3±20%	0.089	64	1.27	1.56
SLW3012S4R7MST	4.7±20%	0.107	61	1.09	1.43
SLW3012S6R8MST	6.8±20%	0.169	61	0.91	1.13
SLW3012S100MST	10±20%	0.236	42	0.72	0.95
SLW3012S120MST	12±20%	0.307	32	0.58	0.84
SLW3012S150MST	15±20%	0.320	27	0.54	0.82
SLW3012S180MST	18±20%	0.485	25	0.52	0.67
SLW3012S220MST	22±20%	0.574	23	0.51	0.61
SLW3012S270MST	27±20%	0.685	21	0.48	0.56
SLW3012S330MST	33±20%	0.779	18	0.44	0.53
SLW3012S360MST	36±20%	0.846	18	0.41	0.51
SLW3012S390MST	39±20%	1.184	18	0.37	0.43
SLW3012S470MST	47±20%	1.228	14	0.32	0.41
SLW3012S560MST	56±20%	1.228	14	0.31	0.41
SLW3012S620MST	62±20%	1.362	12	0.30	0.40
SLW3012S680MST	68±20%	1.486	12	0.29	0.38
SLW3012S820MST	82±20%	2.261	12	0.26	0.31
SLW3012S101MST	100±20%	2.545	12	0.25	0.29

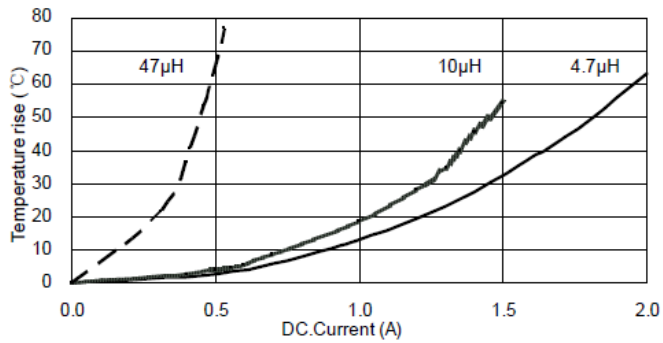
### ◆ Note

- 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.

◆ TYPICAL ELECTRICAL CHARACTERISTICS

### SLW3012 Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

