

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

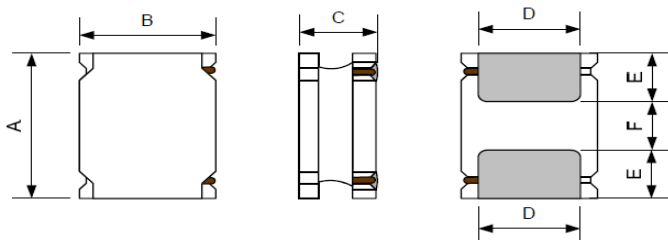
- 1、LED Lighting;
- 2、Mobile devices with multifunction such as adding color TV and camera;
- 3、Flat-screen TVs, blue-ray disc recorders, set top boxes;
- 4、Notebooks, desktop computers, servers, graphic cards;
- 5、Portable gaming devices, personal navigation systems, personal multimedia devices;
- 6、Automotive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

◆ Lead Free Part Numbering

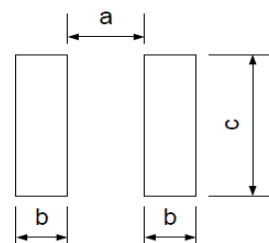
SLW 252012 S 2R2 N S T
(1) (2) (3) (4) (5) (6) (7)

- (1) Series Type
- (2) Dimension: L × W × H (2.5 × 2.0 × 1.2mm)
- (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.
SLW252012	2.5±0.1	2.0±0.1	1.2Max.	1.5±0.2	0.80±0.2	0.80±0.2	0.8	0.85	2.0

◆ Specification

Part Number	Inductance @100KHz,1V (μ H)	DC Resistance(Ω)		Saturation Current(A)		Heat Rating Current (A)
		Max.	Typ.	Min.	Typ.	Typ.
		DCR		Isat		Irms
SLW252012 Series						
SLW252012SR47NST	0.47 \pm 30%	0.045	0.041	4.03	4.51	2.59
SLW252012SR68NST	0.68 \pm 30%	0.079	0.072	3.43	3.84	1.97
SLW252012S1R0NST	1.0 \pm 30%	0.092	0.083	3.00	3.36	1.80
SLW252012S1R2NST	1.2 \pm 30%	0.107	0.097	2.67	2.99	1.66
SLW252012S1R5NST	1.5 \pm 30%	0.122	0.110	2.51	2.81	1.60
SLW252012S2R2NST	2.2 \pm 30%	0.158	0.130	2.07	2.32	1.31
SLW252012S2R7MST	2.7 \pm 20%	0.199	0.181	1.92	2.15	1.24
SLW252012S3R3MST	3.3 \pm 20%	0.216	0.196	1.80	2.02	1.19
SLW252012S3R6MST	3.6 \pm 20%	0.289	0.263	1.66	1.86	1.03
SLW252012S4R3MST	4.3 \pm 20%	0.314	0.284	1.53	1.71	0.99
SLW252012S4R7MST	4.7 \pm 20%	0.341	0.299	1.32	1.48	0.96
SLW252012S5R1MST	5.1 \pm 20%	0.340	0.309	1.32	1.48	0.96
SLW252012S5R6MST	5.6 \pm 20%	0.361	0.327	1.27	1.41	0.92
SLW252012S6R2MST	6.2 \pm 20%	0.450	0.409	1.15	1.30	0.83
SLW252012S6R8MST	6.8 \pm 20%	0.482	0.438	1.10	1.22	0.79
SLW252012S7R5MST	7.5 \pm 20%	0.507	0.460	1.09	1.22	0.78
SLW252012S8R2MST	8.2 \pm 20%	0.546	0.495	1.10	1.23	0.74
SLW252012S9R1MST	9.1 \pm 20%	0.600	0.540	1.06	1.19	0.71
SLW252012S100MST	10 \pm 20%	0.621	0.564	0.99	1.09	0.71
SLW252012S120MST	12 \pm 20%	0.892	0.810	0.87	0.97	0.58
SLW252012S150MST	15 \pm 20%	0.132	1.200	0.76	0.85	0.48
SLW252012S220MST	22 \pm 20%	1.640	1.480	0.59	0.66	0.43

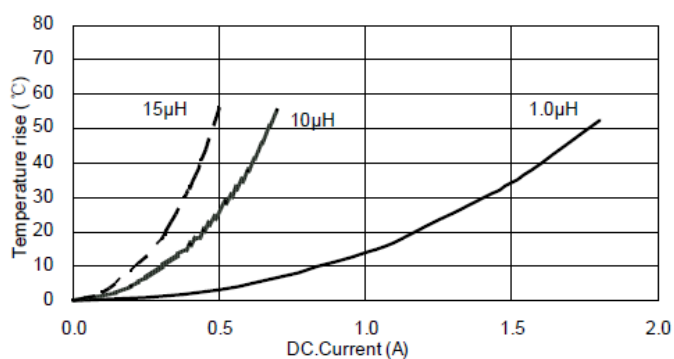
◆ Note

- 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

SLW252012 Series

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

