

绕线贴片功率电感—RWPA252012S 系列

Wire Wound SMD Power Inductors—RWPA252012S Series

Operating temperature range: -25°C to +120°C (Including self-heating)



特征

- 磁性胶水涂敷结构极大减少了蜂鸣声
- 直接在磁芯上金属化电极，抗跌落冲击强，经久耐用
- 闭合磁路结构设计，漏磁少，抗 EMI 能力强
- 同等尺寸，额定电流特性较传统电感高出 30%以上
- 省空间，更省电

FEATURES

- Magnetic-resin shielded construction reduces buzz noise to ultra-low levels
- Metallization on Ferrite Core results in excellent shock resistance and damage-free durability
- Closed magnetic circuit design reduces leakage flux and Electro Magnetic Interference (EMI)
- 30% higher current rating than conventional inductors of equal size
- Takes up less PCB real estate and save more power

用途

- 多功能手机
- 平板电视、蓝光 DVD、机顶盒
- 笔记本电脑、台式电脑、服务器、显卡
- 便携式游戏机、个人导航系统、多媒体
- 汽车产品
- 通信设备

APPLICATIONS

- Next-generation mobile devices with multifunction such as adding color TV and digital movie cameras
- Flat-screen TVs, blue-ray disc recorders, set top box
- Notebooks, desktop computers, servers, graphic cards
- Portable gaming devices, personal navigation systems, personal multimedia devices
- Automotive systems
- Telecomm base stations

产品型号

PRODUCT IDENTIFICATION

RWPA

252012

S

①

②

③

□□□

□

T

④

⑤

⑥

① 分类 Type	
RWPA	Wire Wound SMD Power Inductor, Newly Magnetic-resin Shielded Structure

④ 公称感量 Nominal Inductance	
Example	Nominal Value
1R0	1.0μH
100	10μH

② 外形尺寸(L×W×H) (mm) External Dimensions(L×W×H) [mm]	
252012	2.5×2.0×1.2

⑤ 感量精度 Inductance Tolerance	
N	±30%
M	±20%

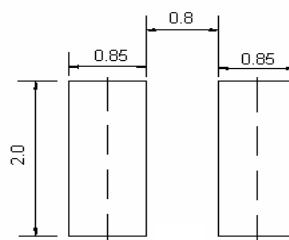
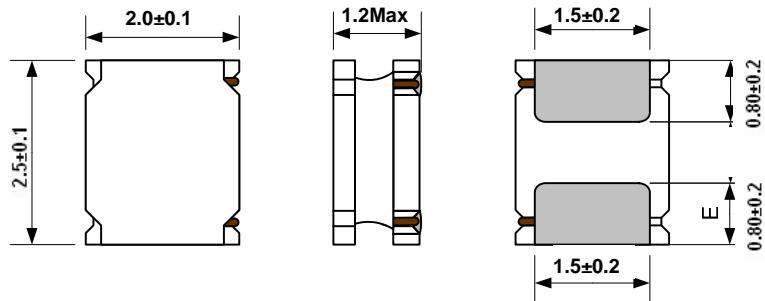
③ 特性类型 Feature type	
S	标准型 Standard

⑥ 包装 Packing	
T	编带 Tape Carrier Package

外观尺寸

SHAPE AND DIMENSIONS

Recommended Land Pattern



规格特性

SPECIFICATIONS

RWPA252012S Series

Part Number 型号	Inductance 电感量 @100KHz, 1V	DC Resistance 直流电阻		Saturation Current 饱和电流 ^{*3}		Heat Rating Current 温升电流 ^{*4}
		Max.	Tye.	Max.	Typ.	
Units 单位	μH	Ω	Ω	A	A	A
Symbol 符号	L	DCR		Isat		Irms
RWPA252012SR47NT	0.47±30%	0.050	0.042	3.60	4.03	2.27
RWPA252012SR68NT	0.68±30%	0.088	0.073	3.06	3.43	1.73
RWPA252012S1R0NT	1.0±30%	0.102	0.085	2.68	3.00	1.58
RWPA252012S1R2NT	1.2±30%	0.19	0.099	2.38	2.67	1.46
RWPA252012S1R5MT	1.5±20%	0.136	0.113	2.24	2.51	1.40
RWPA252012S2R2MT	2.2±20%	0.198	0.165	1.85	2.07	1.15
RWPA252012S2R7MT	2.7±20%	0.222	0.185	1.71	1.92	1.09
RWPA252012S3R3MT	3.3±20%	0.240	0.200	1.61	1.80	1.04
RWPA252012S3R6MT	3.6±20%	. 0.322	0.268	1.48	1.66	0.90
RWPA252012S4R3MT	4.3±20%	0.348	0.290	1.37	1.53	0.87
RWPA252012S4R7MT	4.7±20%	. 0.378	0.315	1.18	1.32	0.84
RWPA252012S5R1MT	5.1±20%	0.378	0.315	1.18	1.32	0.84
RWPA252012S5R6MT	5.6±20%	0.401	0.334	1.13	1.26	0.81
RWPA252012S6R2MT	6.2±20%	0.500	0.417	1.03	1.16	0.73
RWPA252012S6R8MT	6.8±20%	0.536	0.447	0.98	1.09	0.69
RWPA252012S7R5MT	7.5±20%	0.564	0.470	0.97	1.09	0.68
RWPA252012S8R2MT	8.2±20%	. 0.607	0.506	0.98	1.10	0.65
RWPA252012S9R1MT	9.1±20%	0.667	0.556	0.95	1.06	0.62
RWPA252012S100MT	10±20%	0.699	0.575	0.88	0.97	0.62
RWPA252012S120MT	12±20%	0.992	0.827	0.78	0.87	0.51
RWPA252012S150MT	15±20%	1.469	1.224	0.68	0.76	0.42
RWPA252012S220MT	22±20%	1.824	1.520	0.53	0.59	0.38

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

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

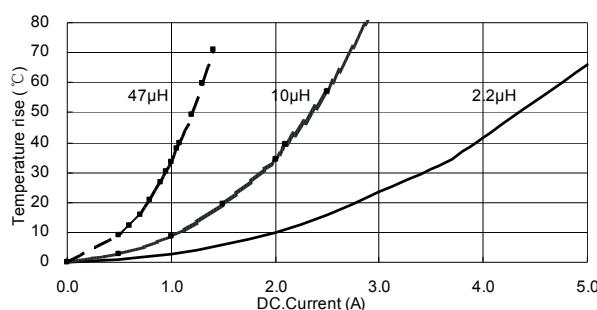
※*3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

※*4. Irms: DC current that causes the temperature rise ($\Delta T = 40^\circ\text{C}$) from 20°C ambient.

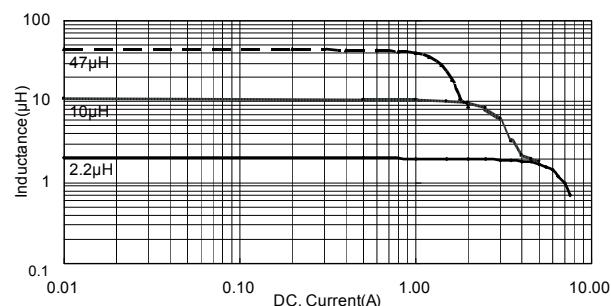
电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



Weight: 23.6mg

Tape and reel: 2000/7" reel, 8mm tape width