

# 绕线贴片功率电感—RWPA5020S 系列

## Wire Wound SMD Power Inductors—RWPA5020S 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

- LED 照明
- 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

- LED Lighting
- 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

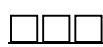
### 产品型号

### PRODUCT IDENTIFICATION

**RWPA**

**5020**

**S**



**T**

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③

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	1μH
100	10μH

②	外形尺寸(L×H) (mm) External Dimensions(L×H) [mm]
5020	5.0×2.0

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

③	特性类型 Feature type
S	标准型 Standard

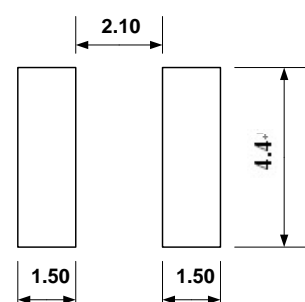
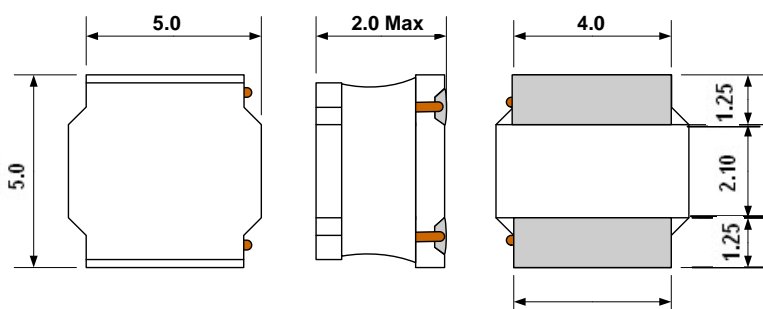
⑥	包装 Packing
T	编带 Tape Carrier Package

### 外观尺寸

### SHAPE AND DIMENSIONS

Unit: mm Tolerance: ±0.2

Recommended Land Pattern



**规格特性**

**SPECIFICATIONS**

RWPA5020S Series

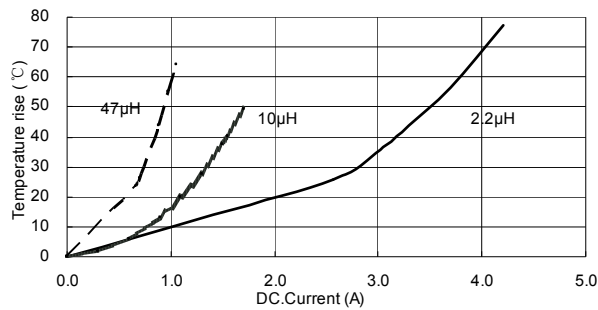
Part Number 型号	Inductance 电感量 @100KHz,1V	DC Resistance 直流电阻 (±30%)	Min. Self-resonant Frequency 自谐频率	Saturation Current 饱和电流*3	Heat Rating Current 温升电流*4
Units 单位	μH	Ω	MHz	A	A
Symbol 符号	L	DCR	S.R.F	Isat	Irms
RWPA5020S1R0NT	1.0±30%	0.018	97	4.33	3.70
RWPA5020S1R5NT	1.5±30%	0.026	80	3.85	3.20
RWPA5020S2R2NT	2.2±30%	0.035	61	3.85	2.90
RWPA5020S3R3NT	3.3±30%	0.044	46	3.25	2.40
RWPA5020S4R7NT	4.7±30%	0.059	33	2.40	2.05
RWPA5020S6R8MT	6.8±20%	0.087	30	1.80	1.70
RWPA5020S100MT	10±20%	0.110	24	1.79	1.50
RWPA5020S150MT	15±20%	0.165	20	1.44	1.25
PWPA5020S220MT	22±20%	0.235	16	1.18	1.05
RWPA5020S330MT	33±20%	0.370	13	0.97	0.83
RWPA5020S470MT	47±20%	0.525	11	0.81	0.70
RWPA5020S680MT	68±20%	0.885	8.8	0.70	0.53
RWPA5020S101MT	100±20%	1.060	7.6	0.57	0.49

- ※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.

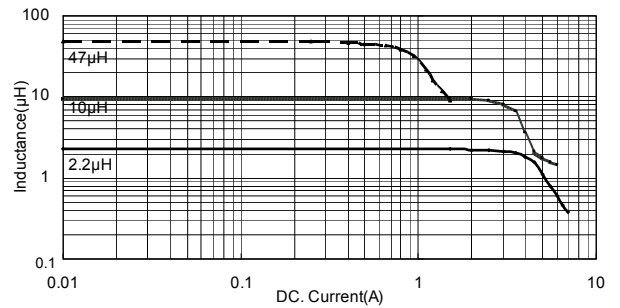
**电气特性**

**TYPICAL ELECTRICAL CHARACTERISTICS**

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



**Weight:** 181.5mg

**Tape and reel:** 2000/13" reel, 12 mm tape width