

绕线贴片功率电感—RWPA5040S 系列

Wire Wound SMD Power Inductors—RWPA5040S 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

5040

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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
1R5	1.5μH
100	10μH

②	外形尺寸(L×H) (mm) External Dimensions(L×H) [mm]
5040	5.0X4.0

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

③	特性类型 Feature type
S	标准型 Standard

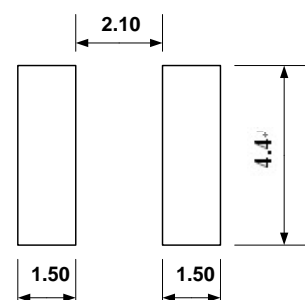
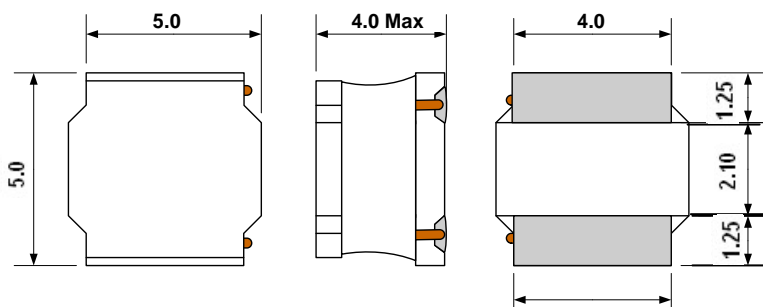
⑥	包装 Packing
T	编带 Tape Carrier Package

外观尺寸

SHAPE AND DIMENSIONS

Unit: mm Tolerance: ±0.2

Recommended Land Pattern



RWPA5040S 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
RWPA5040S1R5NT	1.5±30%	0.013	60	7.30	4.45
RWPA5040S2R2NT	2.2±30%	0.017	42	6.50	3.95
RWPA5040S3R3NT	3.3±30%	0.025	32	5.10	3.40
RWPA5040S4R7NT	4.7±30%	0.029	28	4.40	3.10
RWPA5040S6R8MT	6.8±20%	0.043	21	3.80	2.40
RWPA5040S100MT	10±20%	0.055	18	2.90	2.10
RWPA5040S150MT	15±20%	0.089	13	2.30	1.60
RWPA5040S220MT	22±20%	0.126	9	1.90	1.40
RWPA5040S330MT	33±20%	0.192	7	1.60	1.20
RWPA5040S470MT	47±20%	0.283	6	1.30	0.94

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

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

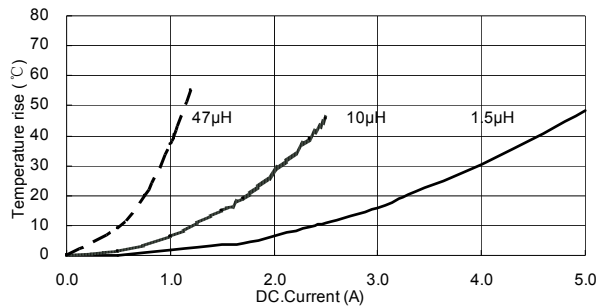
※*3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

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

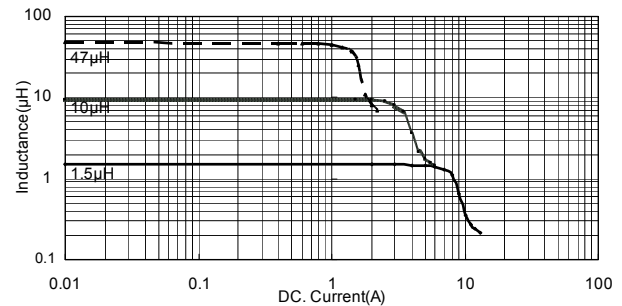
电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



Weight: 360.2mg

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