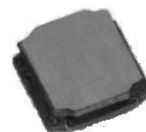


绕线贴片功率电感—ALWPF3012S 系列

Wire Wound SMD Power Inductors—ALWPF3012S Series

Operating temperature range: -25℃ to +120℃ (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

ALWPF

3012

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①	分类 Type
ALWPF	Wire wound SMD power inductor

②	外形尺寸(L×H) (mm) External Dimensions(L×H) [mm]
3012	3.0X1.2

③	特性类型 Feature type
—	标准型 Standard

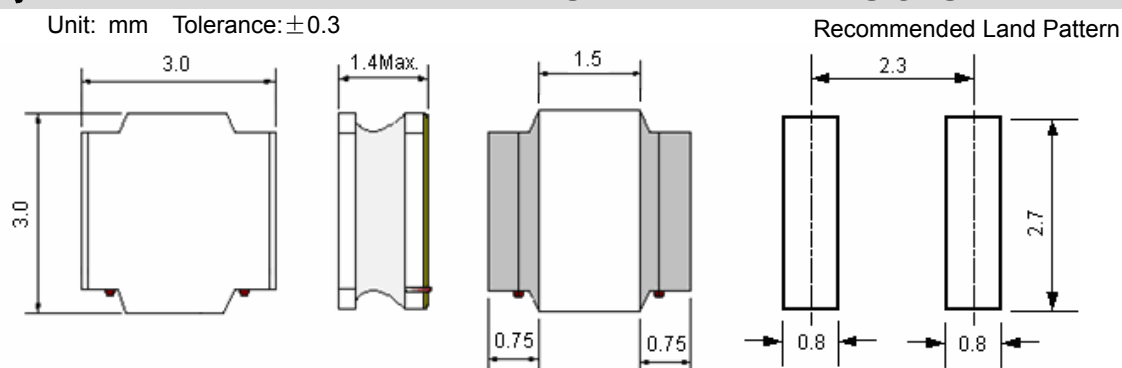
④	公称感量 Nominal Inductance
Example	Nominal Value
1R5	1.5μH
100	10μH

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

⑥	包装 Packing
T	编带 Tape Carrier Package

外观尺寸

SHAPE AND DIMENSIONS



规格特性

SPECIFICATIONS

ALWPF3012- Series

Part Number 型号	Inductance 电感量 @100KHz,1V	DC Resistance 直流电阻 (±30%)	Min. Self-resonant Frequency 自谐振频率	Max. Saturation Current 直流重叠电流*3	Max. Heat Rating Current 温升许容电流*4
Units 单位	μH	Ω	MHz	A	A
Symbol 符号	L	DCR	SRF	Isat	Irms
ALWPF3012-R82NT	0.82±30%	0.030	180	2.05	2.47
ALWPF3012-1R0NT	1.0±30%	0.040	120	1.87	2.20
ALWPF3012-1R2NT	1.2±30%	0.045	120	2.22	2.01
ALWPF3012-1R5NT	1.5±30%	0.045	110	1.62	2.01
ALWPF3012-1R8NT	1.8±30%	0.055	90	1.51	1.84
ALWPF3012-2R2NT	2.2±30%	0.075	84	1.20	1.55
ALWPF3012-2R7NT	2.7±30%	0.085	65	1.14	1.48
ALWPF3012-3R3NT	3.3±30%	0.100	64	1.05	1.36
ALWPF3012-4R7MT	4.7±20%	0.120	61	0.90	1.24
ALWPF3012-6R8MT	6.8±20%	0.190	61	0.75	0.98
ALWPF3012-100MT	10±20%	0.265	42	0.60	0.83
ALWPF3012-120MT	12±20%	0.345	32	0.48	0.73
ALWPF3012-150MT	15±20%	0.360	27	0.45	0.71
ALWPF3012-180MT	18±20%	0.545	25	0.43	0.58
ALWPF3012-220MT	22±20%	0.645	23	0.42	0.53
ALWPF3012-270MT	27±20%	0.770	21	0.40	0.49
ALWPF3012-330MT	33±20%	0.875	18	0.36	0.46
ALWPF3012-360MT	36±20%	0.950	18	0.34	0.44
ALWPF3012-390MT	39±20%	1.08	18	0.30	0.41
ALWPF3012-470MT	47±20%	1.10	14	0.27	0.41
ALWPF3012-560MT	56±20%	1.38	14	0.26	0.36
ALWPF3012-620MT	62±20%	1.53	12	0.25	0.35
ALWPF3012-680MT	68±20%	1.67	12	0.24	0.33
ALWPF3012-820MT	82±20%	1.90	12	0.22	0.31
ALWPF3012-101MT	100±20%	2.86	12	0.21	0.25

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

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

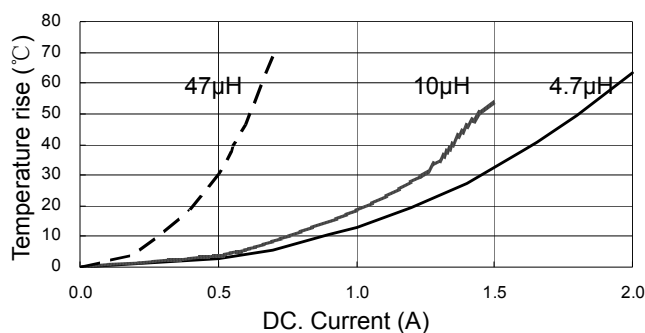
※*3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

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

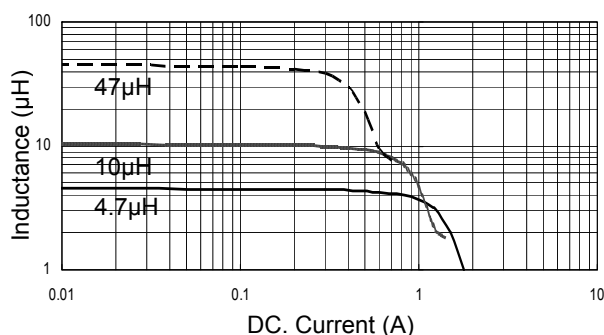
电气特性

TYPICAL ELECTRICAL CHARACTERISTICS

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



Weight: 35mg

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