

绕线贴片功率电感—ALWPJ 4030- 系列

Wire Wound SMD Power Inductors—ALWPJ 4030- 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

ALWPJ

4030

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①	分类 Type
ALWPJ	Wire wound SMD power inductor

②	外形尺寸(L×H) (mm) External Dimensions(L×H) [mm]
4030	4.0X3.0

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%

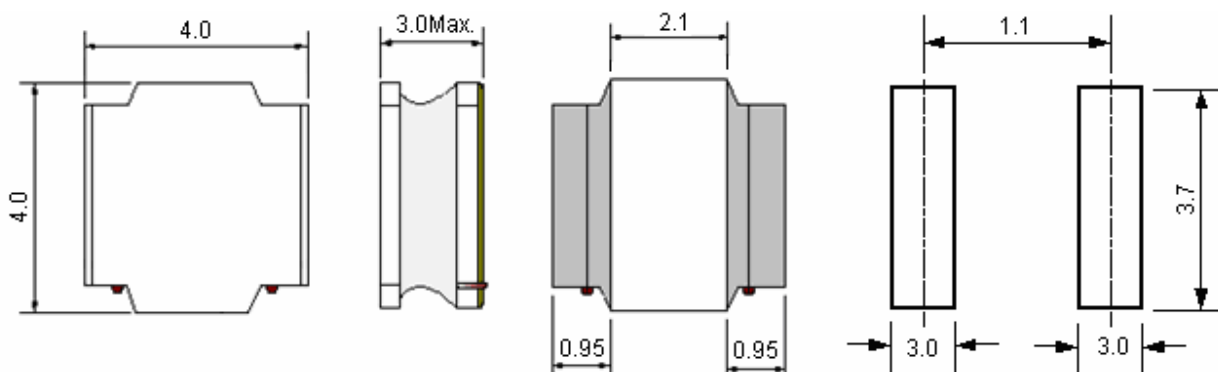
⑥	包装 Packing
T	编带 Tape Carrier Package

外观尺寸

Unit: mm Tolerance: ±0.3

SHAPE AND DIMENSIONS

Recommended Land Pattern



规格特性

SPECIFICATIONS

ALWPJ 4030- 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	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
ALWPJ4030-R91 NT	0.91±30%	0.010	100	6.25	4.15
*4030-1R2NT	1.2±30%	0.015	80	5.80	3.82
*4030-1R5NT	1.5±30%	0.020	62	4.84	3.34
*4030-1R8NT	1.8±30%	0.025	60	5.40	3.20
*4030-2R2NT	2.2±30%	0.030	52	4.90	2.95
*4030-3R3NT	3.3±30%	0.040	38	3.30	2.40
*4030-4R3MT	4.3±20%	0.055	37	2.95	2.10
*4030-4R7MT	4.7±20%	0.060	31	2.90	2.00
*4030-5R6MT	5.6±20%	0.065	30	2.60	1.95
*4030-6R2MT	6.2±20%	0.070	29	2.50	1.85
*4030-6R8MT	6.8±20%	0.090	24	2.75	1.60
*4030-7R5MT	7.5±20%	0.085	26	2.20	1.65
*4030-8R2MT	8.2±20%	0.090	26	2.10	1.60
*4030-9R1MT	9.1±20%	0.095	23	2.00	1.55
*4030-100MT	10±20%	0.100	21	1.95	1.50
*4030-120MT	12±20%	0.135	18	1.70	1.30
*4030-150MT	15±20%	0.190	16	1.65	1.11
*4030-180MT	18±20%	0.200	10	1.40	1.10
*4030-220MT	22±20%	0.225	10	1.30	1.00
*4030-330MT	33±20%	0.330	10	1.10	0.84
*4030-360MT	36±20%	0.335	9.8	1.05	0.83
*4030-390MT	39±20%	0.435	10	1.03	0.73
*4030-430MT	43±20%	0.440	9.2	1.00	0.73
*4030-470MT	47±20%	0.445	8.4	0.95	0.72
*4030-510MT	51±20%	0.470	8.4	0.90	0.70
*4030-560MT	56±20%	0.555	8.4	0.85	0.65
*4030-620MT	62±20%	0.585	7.0	0.80	0.63
*4030-680MT	68±20%	0.700	7.0	0.75	0.58
*4030-750MT	75±20%	1.02	6.3	0.70	0.48
*4030-820MT	82±20%	1.06	5.6	0.66	0.47
*4030-910MT	91±20%	1.10	5.6	0.65	0.46
*4030-101MT	100±20%	1.15	5.6	0.60	0.45
*4030-121MT	120±20%	1.35	5.4	0.55	0.42

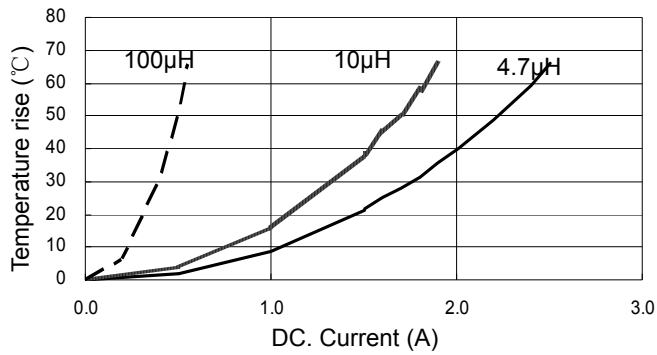
※1. All test data is referenced to 20°C ambient;

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

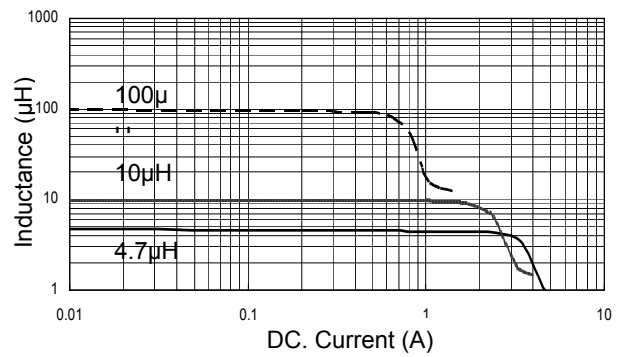
※*3. Isat: DC current at which the inductance drops approximate 30% from its value without current;

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

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics



Weight: 166mg

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