

绕线贴片功率电感—ALWPM8040- 系列

Wire Wound SMD Power Inductors—ALWPM8040- 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
- 新一代多功能手机(手机电视、数码相机等)
- 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

ALWPM

8040

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①	分类 Type
ALWPM	Wire wound SMD power inductor

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

②	外形尺寸(L×H) (mm) External Dimensions(L×H) [mm]
8040	8.0X4.0

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

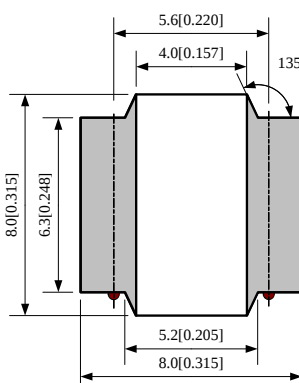
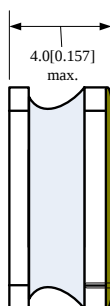
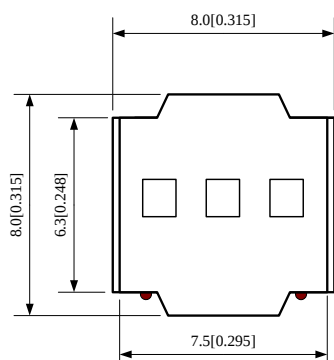
③	特性类型 Feature type
—	标准型 Standard

⑥	包装 Packing
T	编带 Tape Carrier Package

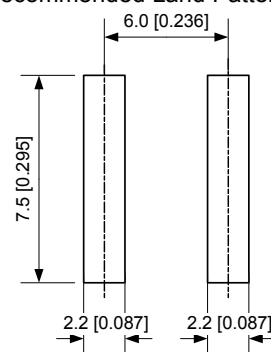
外观尺寸

SHAPE AND DIMENSIONS

Unit: mm [inch]
Tolerance: ±0.3



Recommended Land Pattern



Weight: 885mg

Tape and reel: 1000/13" reel, 16 mm tape width

ALEVEL

ALEVEL International(H.K.)limited

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规格特性

SPECIFICATIONS

ALWPM8040- 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
ALWPM8040-1R0N	1.0	0.008	89	9.85	6.30
ALWPM8040-1R5N	1.5	0.010	67	8.15	5.65
ALWPM8040-2R2N	2.2	0.012	41	7.10	5.15
ALWPM8040-3R0N	3.0	0.014	32	6.10	4.70
ALWPM8040-3R9N	3.9	0.017	26	5.75	4.35
ALWPM8040-5R1N	5.1	0.019	22	4.70	4.05
ALWPM8040-6R2N	6.2	0.021	20	4.45	3.85
ALWPM8040-6R8N	6.8	0.024	20	4.55	3.60
ALWPM8040-8R2N	8.2	0.026	17	4.20	3.45
ALWPM8040-100M	10	0.029	15	3.60	3.30
ALWPM8040-150M	15	0.047	12	2.95	2.60
ALWPM8040-180M	18	0.053	11	2.70	2.40
ALWPM8040-220M	22	0.069	9.5	2.40	2.10
ALWPM8040-270M	27	0.078	9.2	2.15	2.00
ALWPM8040-330M	33	0.097	7.8	2.05	1.80
ALWPM8040-360M	36	0.102	7.8	2.00	1.75
ALWPM8040-390M	39	0.107	7.8	1.95	1.70
ALWPM8040-430M	43	0.113	7.8	1.90	1.65
ALWPM8040-470M	47	0.136	6.4	1.75	1.55
ALWPM8040-510M	51	0.142	6.4	1.70	1.50
ALWPM8040-560M	56	0.148	6.4	1.55	1.45
ALWPM8040-620M	62	0.182	6.4	1.50	1.30
ALWPM8040-680M	68	0.196	4.9	1.45	1.25
ALWPM8040-750M	75	0.211	4.9	1.35	1.20
ALWPM8040-910M	91	0.272	4.9	1.20	1.05
ALWPM8040-101M	100	0.290	4.2	1.15	1.00
ALWPM8040-121M	120	0.334	3.5	1.05	0.95
ALWPM8040-221M	220	0.599	3.5	0.85	0.80
ALWPM8040-331M	330	0.889	2.8	0.68	0.64

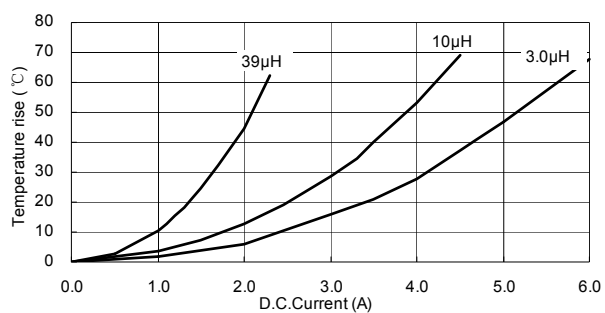
Notes: 1. All test data is referenced to 20°C ambient;

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.

Temperature vs. DC Current Characteristics



Inductance vs. DC Current Characteristics

