

组装式绕线贴片功率电感—AWPE 系列 Assembled Wire Wound SMD Power Inductor—AWPE Series



工作温度：-55℃ ~+150℃ (含自温升)
Operating Temp：-55℃ ~+150℃ (Including self-heating)

特征 FEATURES

- ◆ 金属合金磁芯
- ◆ 高饱和电流, 低直流电阻
- ◆ 优异的温度特性
- ◆ 高可靠性, 满足 AEC-Q200 要求
- ◆ 结构简单, 便于组装
- ◆ 闭合磁路结构设计, 减少漏磁
- ◆ Metal alloy core
- ◆ High saturation current, low DC resistance
- ◆ Excellent temperature stability
- ◆ High reliability, AEC-Q200 qualified
- ◆ Simple assembled structure
- ◆ Close magnetic circuit design reduce leakage

用途 APPLICATIONS

- ◆ 车载信息娱乐系统
- ◆ LED 灯
- ◆ 安全气囊
- ◆ 除汽车动力、安全以外的电源系统
- ◆ Infotainment system
- ◆ LED lighting
- ◆ Airbag
- ◆ Power supply system except for power engine or chassis and safety system

产品型号 PRODUCT IDENTIFICATION

1	2	3	4	5	6	7
AWPE	101006	H	2R2	M	T	□□□

1	分类 Type
AWPE	组装式绕线贴片功率电感 Assembled Wire Wound SMD Power Inductor

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

2	外形尺寸 (L×W×H) [mm] External Dimensions (L×W×H) [mm]
101006	10×10×6.0

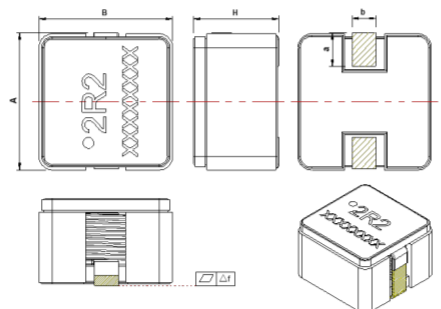
6	包装 Packing
T	编带 Tape Carrier Package

3	特性类别 Feature Type
H	H Type material

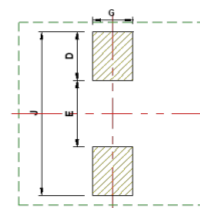
4	公称感量 Nominal Inductance
Example	Nominal Value
2R2	2.2μH

7	设计代码 Design Code	
□□□	blank	Flat wire
	R01	Round wire

外观尺寸 SHAPE AND DIMENSIONS



推荐焊盘 Recommended Land Pattern



单位 Unit: mm

A	B	H	△f	a	b	D	E	G	J
10.2±0.5	10.0±0.5	6.2±0.5	0.1Max.	2.2±0.3	1.8±0.2	3.2Typ.	4.8Typ.	2.6Typ.	11.2 Typ.

规格特性

SPECIFICATIONS

AWPE101006H Series

型号 Part Number	电感量 Inductance	直流电阻 DC Resistance		饱和电流 Saturation Current	温升电流 Heat Rating Current
	0.1MHz/1V	Max.	Typ.	Typ.	Typ.
单位 Units	μH	mΩ		A	A
符号 Symbol	L	DCR		Isat	Irms
AWPE101006H1R0MT	1.0±20%	2.8	2.3	25.6	22
AWPE101006H1R5MT	1.5±20%	3.4	2.8	21.6	20
AWPE101006H2R2MT	2.2±20%	4	3.3	19.2	18
AWPE101006H3R3MT	3.3±20%	6.1	5.1	13.2	15.5
AWPE101006H4R7MT	4.7±20%	7.7	6.4	12	14
AWPE101006H5R6MT	5.6±20%	12.7	10.6	11.2	10.5
AWPE101006H6R8MT	6.8±20%	13.9	11.6	10.8	10
AWPE101006H8R2MT	8.2±20%	15.1	12.6	8.4	9

注：※1: 额定电流: Isat 或 Irms, 以较小数据为准。

※2: 饱和电流: 电感比初始电感量下降小于 30% 时, 所对应的直流电流的大小;

※3: 温升电流: 温度从 25°C 环境温度上升 (ΔT) 时, 所对应的直流电流的大小 (ΔT 不会超过 40)。

在最坏的操作条件下, 零件温度 (环境温度 + 温升) 不应超过 150°C。电路设计、元件放置、PCB 走线尺寸和厚度、气流和其他冷却规定都会影响零件温度。应在最终应用中验证零件温度。

Note: ※1: Rated current: Isat or Irms, whichever is smaller.

※2: Saturation Current: DC current at which the inductance drops approximate 30% from its value without current.

※3: Heat Rating Current: DC current that causes the temperature rise (ΔT is no more than 40°C) from 25°C ambient;

The part temperature (ambient + temp. rise) should not exceed 150 °C under worst case operating conditions. Circuit design, component placement, PCB trace size and thickness, airflow and other cooling provisions all affect the part temperature. Part temperature should be verified in the end application.