

# 共烧型功率电感—AHTF-H 系列（单相电感）

## Co-fired Alloy Power Inductor—AHTF-H Series (Single-phase Inductor)



工作温度：-55°C ~+165°C (含自温升)  
Operating Temp：-55°C ~+165°C (Including self-heating)

### 特征

#### FEATURES

- ◆ 超薄
- ◆ Ultra-thin
- ◆ 高通流, 低损耗
- ◆ High operating current and low loss
- ◆ 高可靠性
- ◆ High reliability

### 用途

#### APPLICATIONS

- ◆ 智能座舱
- ◆ Intelligent Drive

### 产品型号

#### PRODUCT IDENTIFICATION

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<b>A</b>	<b>HTF</b>	<b>130517</b>	<b>H</b>	<b>R14</b>	<b>L</b>	<b>T</b>	□□□

1 特征码 Feature Code
A 汽车级 For Car Use

2 特征码 Feature Code
HTF 共烧型功感 Co-fired Alloy Power Inductor

3 外形尺寸 (L×W) [mm] External Dimensions(L×W) [mm]	
070415	7.0×4.5×1.5
100424	10.0×4.0×2.4
130517	12.8×4.8×1.7
120840	12.8×8.2×4.0

4 特性类别 Feature Type
H 单相电感 Single-phase Inductor

5 公称电感量 Nominal Inductance	
Example	Nominal Value
R10	0.10uH
R14	0.14uH
R22	0.22uH
50N	0.05uH

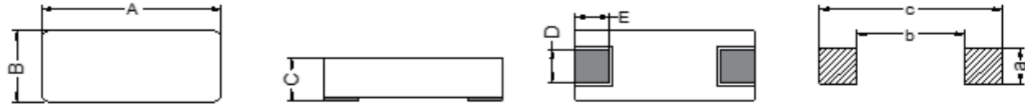
6 感量精度 Inductance Tolerance	
L	±15%
M	±20%

7 包装 Packing	
T	编带 Tape & Reel

8 特殊过程代码 Special Process code	
□□□	Special Process code
* Standard product is blank	

## 外观尺寸 SHAPE AND DIMENSIONS

推荐焊盘 Recommended Land Pattern (Typ.)



单位 Unit: mm

系列 Series	A	B	C	D	E	a	b	c
AHTF070415H50NLT	7.0±0.2	4.5±0.2	1.3±0.2	2.5±0.3	1.5±0.3	2.9 Typ.	3.6 Typ.	7.4 Typ.
AHTF100424HR10LT	10.0±0.2	4.0±0.2	2.4 Max.	3.5±0.3	1.5±0.3	3.9 Typ.	6.6 Typ.	10.4 Typ.
AHTF130517HR14LT	12.8±0.2	4.8 Max.	1.7 Max.	2.2±0.3	1.5±0.3	2.6 Typ.	9.4 Typ.	13.2 Typ.
AHTF120840HR22MT	12.8±0.4	8.2 Max.	4.0 Max.	3.5±0.5	2.5±0.5	5.0 Typ.	6.0 Typ.	14.5 Typ.

## 规格特性 SPECIFICATIONS

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	
单位 Units	nH	mΩ		A		A	
符号 Symbol	L@1MHz	DCR		Isat <sup>※3</sup>		Irms <sup>※4</sup>	
		Max.	Typ.	Max.	Typ.	Max.	Typ.
AHTF070415H50NLT	50±15%	0.27	0.25	40	45	40	45
AHTF100424HR10LT	100±15%	0.35	0.30	51	57	38	45
AHTF130517HR14LT	140±15%	0.45	0.35	36	40	36	42
AHTF120840HR22MT	220±20%	0.60	0.39	63	70	38	45

- ※1: 除了特殊说明, 该系列适用于室温 (25°C)。  
 ※2: 额定电流: Isat(Max.) 或 Irms(Max.), 以较小数据为准。  
 ※3: 饱和电流: Max. 值: 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;  
 Typ. 值: 电感比初始电感量下降大约 30% 时, 所对应的直流电流的大小。  
 ※4: 温升电流: 温度从 20°C 环境温度上升 (ΔT) 时, 所对应的直流电流的大小。  
 对于 Max. 值, ΔT 是小于 40°C;  
 对于 Typ. 值, ΔT 约是 40°C。  
 ※1: All specifications are for room temperature (25 °C) unless otherwise noted.  
 ※2: Rated current: Isat (Max.) or Irms (Max.), whichever is smaller.  
 ※3: Isat: Max.Value, DC current at which the inductance drops less than 30% from its value without current;  
 Typ.Value, DC current at which the inductance drops 30% from its value without current.  
 ※4: Irms: DC current that causes the temperature rise (ΔT) from 20°C ambient.  
 For Max.Value, ΔT<40°C;  
 For Typ.Value, ΔT is approximate 40°C.

## 电气特性 TYPICAL ELECTRICAL CHARACTERISTICS

