广东风华高新科技股份有限公司
GUANGDONG FENGHUA ADVANCED TECHNOLOGY HOLDING CO., LTD.

承　认　书

APPROVAL SHEET

客 户 名 称: **Customer**	/
产 品 名 称: **Part Name**	片式甚高频电感 Chip high frequency inductors
产 品 规 格: **Specification**	AHF160808 Series
版 本 号: **Version No.**	17.01
日　　期: **DATE**	2017-03-02

制造 **Manufacturer**			客户 **Customer**		
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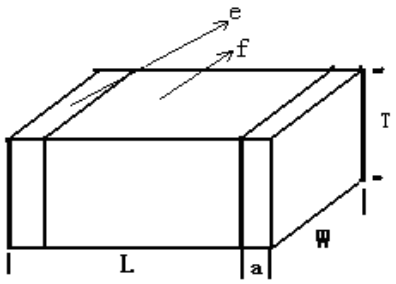
1. 履 历 表 Resume

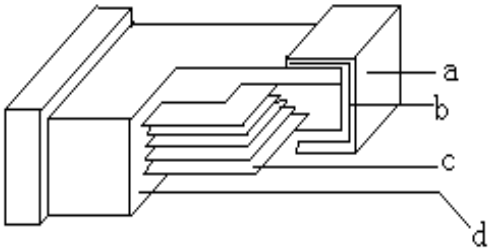
版本 Version No.	修 改 明 细 Modify Details	日期 Date
17.01	首次发行 Initial issue	2017-3-2

2 外形尺寸与内部结构 Dimension & Inner-configuration:

外形尺寸图：



内部结构图：



a. 银层 Ag layer
b.镀层 Ni/Sn plating
c.内电极 Inner electrode
d.瓷体 Body
e.端电极 Terminal electrode
f.瓷体 ferrite or ceramic

序号 No.	部位 Component		材料 Material
1	瓷体Body		甚高频电感：陶瓷体系Al_2O_3
2	内电极Inner electrode		纯银Ag
3	端电极 Terminal electrode	银层 Ag layer	银Ag
		Ni/Sn镀层Ni/Sn plating	镍层-锡层Ni-Sn

单位Unit: mm(inch)

型号 Size	L	W	T	a
160808	1.6±0.20（0.063±0.008）	0.8±0.20（0.031±0.008）	0.8±0.20（0.031±0.008）	0.3±0.2(0.01±0.008)

3 产品品名构成 Product Spec. Model

AHF 160808 H 1N5 S T

包装 Packaging： 散包装 Bulk:B
编带包装 Tape & Reel:T

误差范围 Tolerance：K,±10%、J,±5%、D,±0.5nH、S,±0.3nH

电感量 Inductance：1.5nH

材料代号 Material code：H

尺寸 Dimensions：(L×W×T)（1.6×0.8×0.8mm)

产品类型 Product symbol：
AHF：甚高频电感 high frequency inductor

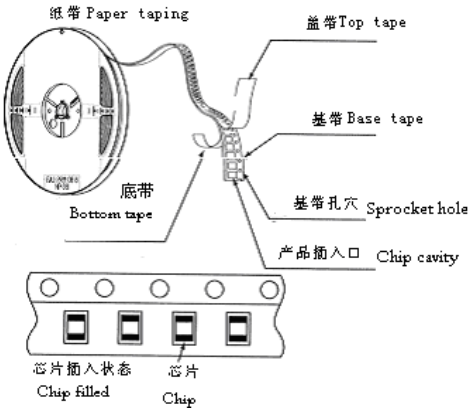
4 电性能参数表 Electrical Characteristics List

型号规格 Part NO.	客户料号 Customer P/N	误差范围 Tolerance (nH)	标称感量 Inductance (nH)	Q 值 (min)	直流电阻 RDC（Ω）max	测试频率 Test frequency (MHz)	测试电压 Test voltage（mV）	自谐振频率 SRF (MHz) min	额定电流 Rated current (mA)max
AHF160808H1N0ST		±0.3	1.0	8	0.05	100	50	10000	500
AHF160808H1N2ST		±0.3	1.2	8	0.10	100	50	10000	500
AHF160808H1N5ST		±0.3	1.5	8	0.10	100	50	10000	400
AHF160808H1N8ST		±0.3	1.8	8	0.12	100	50	9800	400
AHF160808H2N0ST		±0.3	2.0	8	0.20	100	50	7600	400
AHF160808H2N2ST		±0.3	2.2	10	0.20	100	50	7600	400
AHF160808H2N4ST		±0.3	2.4	10	0.20	100	50	7000	400
AHF160808H2N7ST		±0.3	2.7	10	0.20	100	50	7000	400
AHF160808H3N3ST		±0.3	3.3	10	0.20	100	50	6200	400
AHF160808H3N6ST		±0.3	3.6	10	0.25	100	50	5600	400
AHF160808H3N9ST		±0.3	3.9	10	0.25	100	50	5600	400
AHF160808H4N3ST		±0.3	4.3	10	0.30	100	50	4800	400
AHF160808H4N7ST		±0.3	4.7	10	0.30	100	50	4800	400
AHF160808H5N1ST		±0.3	5.1	10	0.30	100	50	4600	400
AHF160808H5N6ST		±0.3	5.6	10	0.30	100	50	4600	400
AHF160808H6N8JT		±5%	6.8	10	0.35	100	50	4200	400
AHF160808H7N5JT		±5%	7.5	10	0.35	100	50	3600	400
AHF160808H8N2JT		±5%	8.2	10	0.35	100	50	3600	400
AHF160808H9N1JT		±5%	9.1	12	0.40	100	50	3200	300
AHF160808H10NJT		±5%	10	12	0.40	100	50	3200	300
AHF160808H12NJT		±5%	12	12	0.40	100	50	2800	300
AHF160808H15NJT		±5%	15	12	0.45	100	50	2600	300
AHF160808H18NJT		±5%	18	12	0.60	100	50	2400	300
AHF160808H22NJT		±5%	22	12	0.60	100	50	2000	300
AHF160808H27NJT		±5%	27	12	0.70	100	50	1900	300

型号规格 Part NO.	客户料号 Customer P/N	误差范围 Tolerance (nH)	标称感量 Inductance (nH)	Q 值 (min)	直流电阻 RDC（Ω）max	测试频率 Test frequency (MHz)	测试电压 Test voltage（mV）	自谐振频率 SRF (MHz) min	额定电流 Rated current (mA)max
AHF160808H33NJT		±5%	33	12	0.70	100	50	1600	300
AHF160808H39NJT		±5%	39	12	0.70	100	50	1400	300
AHF160808H47NJT		±5%	47	12	1.00	100	50	1200	200
AHF160808H56NJT		±5%	56	12	1.00	100	50	1000	200
AHF160808H68NJT		±5%	68	12	1.00	100	50	900	200
AHF160808H82NJT		±5%	82	8	1.00	100	50	800	200
AHF160808HR10JT		±5%	100	8	1.20	100	50	700	200
AHF160808HR12JT		±5%	120	8	1.40	100	50	600	200
AHF160808HR15JT		±5%	150	8	1.60	100	50	500	200
AHF160808HR18JT		±5%	180	8	1.90	100	50	400	200
AHF160808HR18JT		±5%	180	8	1.90	100	50	400	200
AHF160808HR22JT		±5%	220	8	2.40	100	50	350	200

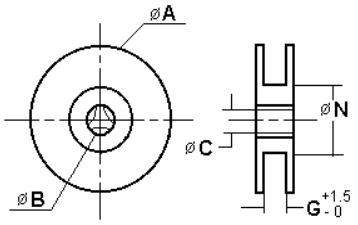
5 产品包装 Packaging

1）编带图 Taping drawings

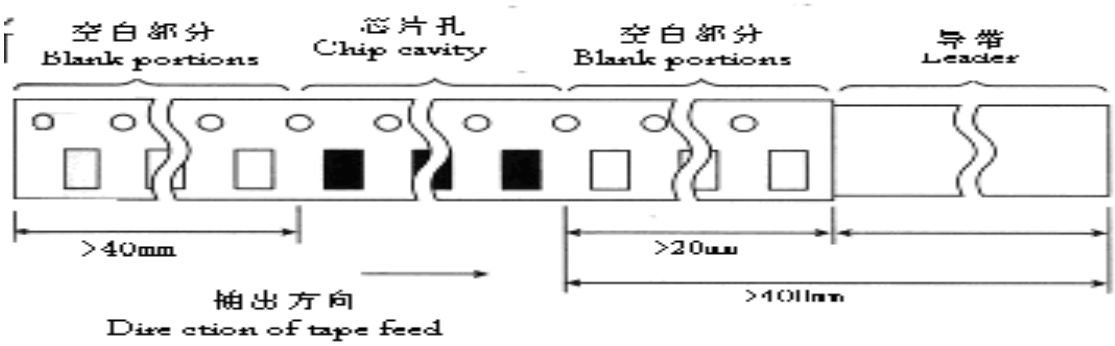


2）卷盘尺寸 Reel dimensions (Unit:mm)

	A	B	C	N	G
CF-8	178 ±2.0	22.0 ±2.0	12.5 ±1.5	57 ±2.0	8
CF-12	330±2 .0	22.0± 2.0	12.5± 1.5	98 ±2.0	1 2



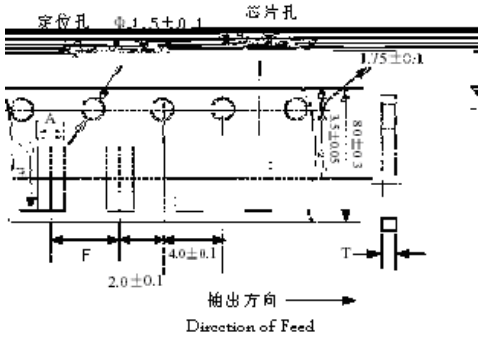
3） 导带及空格部分 Leader and blank portion



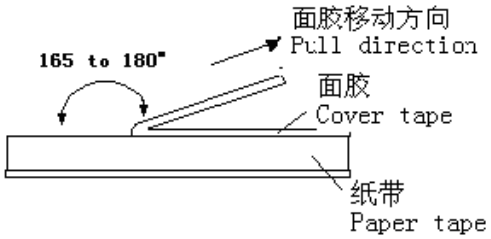
4）编带尺寸 Taping dimensions (Unit: mm)

Part NO.	A	B	F	T
160808	1.1±0.2	1.9±0.2	4.0±0.2	1.1max

纸带 Paper tape



5）剥离力检验　Peeling off force



① 盖带的剥离力：沿面胶移动方向拉时要求剥离力为 0.1N～0.7N。

Peeling force should be 0.1~0.7N pulling in the direction of arrow.

② 剥离速度：300mm/min

Speed of peeling off: 300mm/min.

③ 在纸带、胶带剥落时，面胶不能有破损，不能粘纸带。

The cover bond should not be damaged and bond the tape when it peeled off.

6）包装数量（单位：粒）Packaging number (Unit: Pcs)

类型 SIZE	160808
每卷数量 REEL	4000
每盒数量 BOX	40000
每箱数量 CASE	240000

7) 标签粘贴位置 Label stick station

卷盘标签	纸盒标签	纸盒标签	外箱标签
			

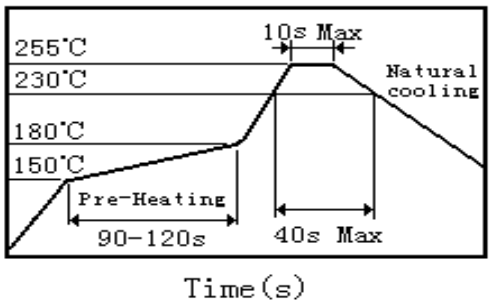
6　推荐焊接条件 Recommend Soldering Conditions

② 焊接要求 Soldering conditions

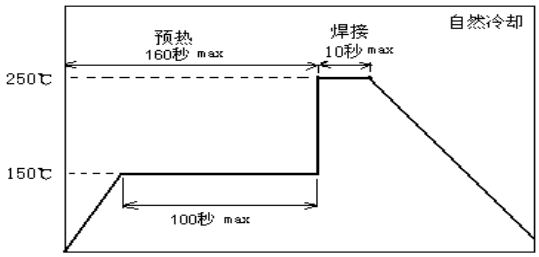
- 预热时，产品表温与焊料温度的温差最大不允许超出 150℃，焊接完冷却时，产品表温与溶剂温度之间的温差最大不超过 100℃。预热不足有可能引发产品表面裂纹，从而导致产品品质下降。
- Pre-heating should be in such a way that the temperature difference between solder and ferrite surface is limited to 150℃ max. Also cooling into solvent after soldering should be in such way that the temperature difference is limited to 100℃ max. Un-enough pre-heating may cause cracks on the ferrite, resulting in the deterioration of product quality.

- 产品要在以下画出的曲线允许的范围内进行焊接。其它焊接条件可能引起产品电极的腐蚀。当焊接重复时，允许的时间为第一次做的累计时间。
- Products should be soldered within the following allowable range indicated by the slanted line. The excessive soldering conditions may cause the corrosion of the electrode. When soldering is repeated, allowable time is the accumulated time.

1） 回流焊曲线 Reflow soldering profile



2）波峰焊曲线 Flow soldering profile

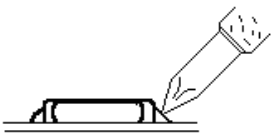


3）手工焊接 Iron soldering

烙铁温度：350℃　Perform soldering at 350℃ on 30W max

功率：最大为 30W　Time: < 5S

烙铁停留时间：< 5S（注意不要将烙铁碰到产品端电极）Take care not to apply the tip of the soldering iron to the terminal electrodes



7 清洗 Cleaning

1）清洗条件 Cleaning Conditions

清洗温度：60℃（最高）　Cleaning temperature : 60℃ max

清洗时间：1 分钟（最少）　Cleaning time: 1 minute min.

超声波功率：最大为 200W　Ultrasonic output power: 200W　max

8 存储要求 Storage Requirements

1）存储期限 Storage period

距电感公司出厂检验时间 6 个月内，产品可以使用检验时间可以通过包装外侧标记的检验号确认。若时间超过 6 个月，应检查焊接性能后方可使用。

Products which inspected in INDUCTOR COMPANY over 6 months ago should be examined and used, which can be Confirmed with inspection No. marked on the container. Solder ability should be checked if this period is exceeded.

2）存储条件 Storage conditions

⑴ 存放货物的库房应满足以下条件：温度：-10 ～ +40℃，相对湿度：30 ～ 70%。

⑵ 禁止将产品保管在腐蚀性物质中，如硫磺、氯气或酸，否则将引起端头氧化，导致降低焊接性。

⑶ 为了避免受潮气、灰尘等物质的影响，产品应保管于货架上。

⑷ 产品保管在库房中，应避免热冲击、振动以及直接光照等等。

⑸ 产品应密封包装。

⑴ Products should be storage in the warehouse on the following conditions:

Temperature : -10~+40℃ Humidity: 30~70% relative humidity

⑵ Don't keep products in corrosive gases such as sulfur, chlorine gas or acid , or it may case oxidization of Electrodes resulting in poor solder ability.

⑶ Products should be storaged on the palette for the prevention of the influence from humidity, dust and so on.

⑷ Products should be storaged in the warehouse without heat shock, vibration, direct sunlight and so on.

⑸ Products should be storaged under the airtight packaged condition.

9 ODS（消耗臭氧层物质）的使用情况 Usage Of ODS

1）对于以下所列物质，我公司在生产过程中绝不使用。

ODS：CCl_4（四氯化碳）、HCFC 等。

1）For ODS listed below , we don't use in process。

ODS: CCl_4, HCFC, etc.

10 注意事项 Notes

（1）若本次承认的为“整体无铅”产品，则表明该产品符合 RoHS 指令的要求。

（2）本承认书保证我司产品作为一个单体时的质量情况，当我司产品被安装到贵司产品上时请保证贵司的产品已根据贵司的规范进行了有效评价和确认。

（3）如果贵司对我司产品的试用已超过了本测试规范所界定的产品功能，对于此所引发的失效我司将不予保证。

（1）If the parcel label on product is "Unitary lead free" that indicate the products in accord with ROHS appointed requests.

（2）This product specification guarantees the quality of our product as a single unit, Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.

（3）We can't warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.