

Hisense 青岛海信电器股份有限公司

## 部品承认书

部品物料编码		
部品描述	内置天线\ACM3-5036-A1-CC-S\中性 \JK\ROH	
日期	2017.02.22	
拟制 DESIGN	审核 CHECKED	批准 APPROVED
供方人员签字	胡志清	杨利

客户审签			
审核(电路) CHECKED BY	审核(结构) CHECKED BY	审核(认定) CHECKED BY	批准 APPROVED BY
刘旗	--	唐银尧	方德文

# 供应商承诺

**承诺批量所供部品与样品一致，  
并满足规格书及相关国标、行标要  
求。**

供应商名称: 丁翰  
禾邦电子(苏州)有限公司

供应商签字(加盖公章): 伏婧



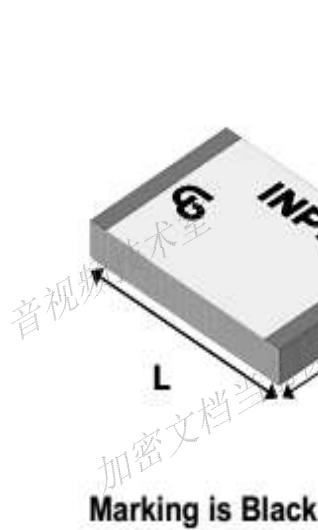
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## 更改履历

版本	变更内容	变更人	生效日期
V1.00	初版制作	刘旗	2017-02-22

## 2.工程图

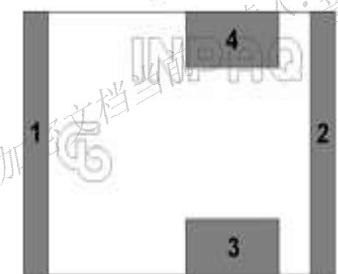


<b>L</b>	$5.20 \pm 0.30$
<b>W</b>	$3.70 \pm 0.30$
<b>H</b>	$0.70 \pm 0.15$
<b>A</b>	$0.45 \pm 0.25$
<b>B</b>	$0.45 \pm 0.25$
<b>L1</b>	$1.60 \pm 0.20$
<b>W1</b>	$0.62 \pm 0.20$
<b>L2</b>	$1.50 \pm 0.20$
<b>W2</b>	$0.62 \pm 0.20$

(Unit: mm)

## Pin Configuration

## Top View



## Pin Assignments

Layout	
Pin	Function
1	GND
2	GND
3	Feed
4	No connect

Mirror Layout	
Pin	Function
1	GND
2	GND
3	No connect
4	Feed

### 3.物料清单

Composition part 構成部件	Material Name. 部件材質名	Supplier 供應商	Element name composition 構成之元素名稱
Ceramic body 丁翰	Substrate	Leatec 丁翰	A1203
	Internal Electrode	ESL	Silver
	Overcoat	OHMCOAT	polymer
	Marking	ONSTATIC	Sb, Bi, Mn, Ni, Co, Cr metal oxide mixture
Terminations	Terminations	Dupont	Ag
External electrode 加密文档当前阅读人:音视频技术室	External electrode 加密文档当前阅读人:音视频技术室	INCO	Ni 加密文档当前阅读人:音视频技术室
		REDSUN	Sn 加密文档当前阅读人:音视频技术室

### 4.物料技术规格:

Item 丁翰	Specification 丁翰	
Frequency Band	2400 ~ 2500 MHz	5000 ~ 6000 MHz
Polarization	Linear 加密文档当前阅读人:音视频技术室	
Impedance	50 ohm Typ. 加密文档当前阅读人:音视频技术室	
VSWR	Less than 2.0	Less than 2.0
*Peak Gain	3.0 dBi Typ.	3.3 dBi Typ.
*Peak Efficiency	73.4% Typ.	80.2% Typ.

\* Test condition: Test board size 80\*40 mm

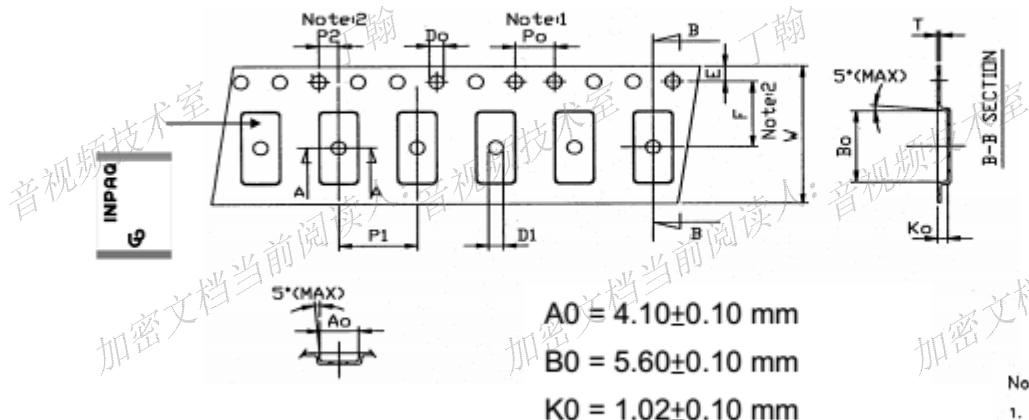
Matching circuit may be required

### 5.标准作业 SOP:

贴片器件随 PCB 贴片

## 6. 包装规格:

- (1) Quantity/Reel: 2000pcs/Reel  
 (2) Carrier tape dimensions



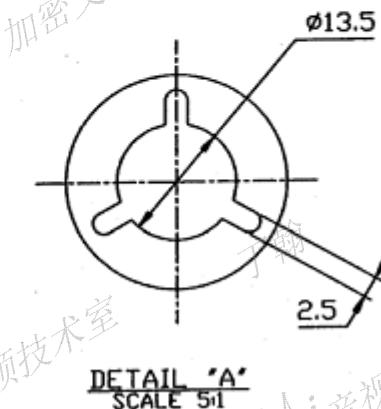
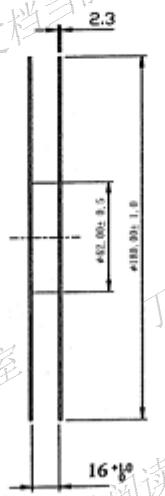
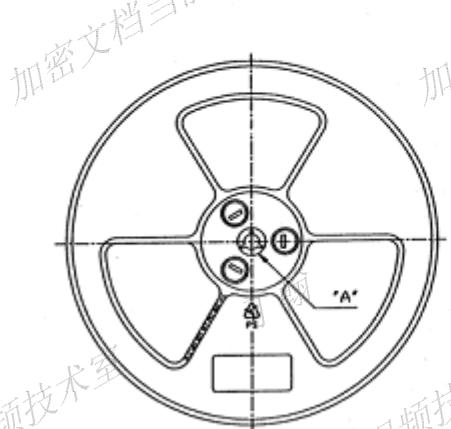
Symbol	Spec.
$Po$	$4.00 \pm 0.1$
$P1$	$8.00 \pm 0.1$
$P2$	$2.00 \pm 0.05$
$Do$	$1.55 \pm 0.05$
$D1$	$1.50 (\text{MIN})$
$E$	$1.75 \pm 0.1$
$F$	$5.50 \pm 0.05$
$10Po$	$40.00 \pm 0.2$
$W$	$12.00 \pm 0.1$
$T$	$0.25 \pm 0.05$

(Unit: mm)

### Notice:

1. 10 Sprocket hole pitch cumulative tolerance is  $\pm 0.1$ mm
2. Pocket position relative to sprocket hole measured as true position of pocket not pocket hole.
3.  $Ao$  &  $Ba$  measured on a plane 0.3mm above the bottom of the pocket to top surface of the carrier.
4.  $Ko$  measured from a plane on the inside bottom of the pocket to the top surface of the carrier.
5. Carrier camber shall be not than 1mm per 100mm through a length of 250mm.

## (3) Taping reel dimensions



DETAIL "A"  
SCALE 5:1

## 7. 标准检验指导书 SIP

无

## 8. 样品测试报告

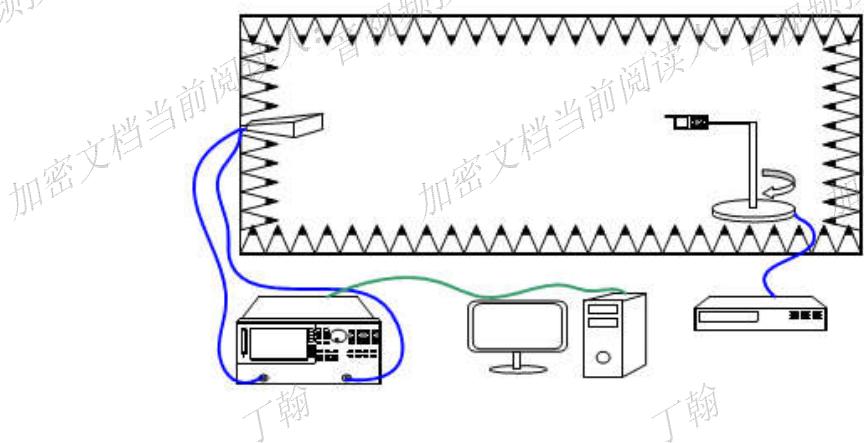
## VSWR



Frequency (MHz)	VSWR
2400	1.7
2450	1.5
2500	1.7
5000	1.7
5500	1.2
6000	1.3

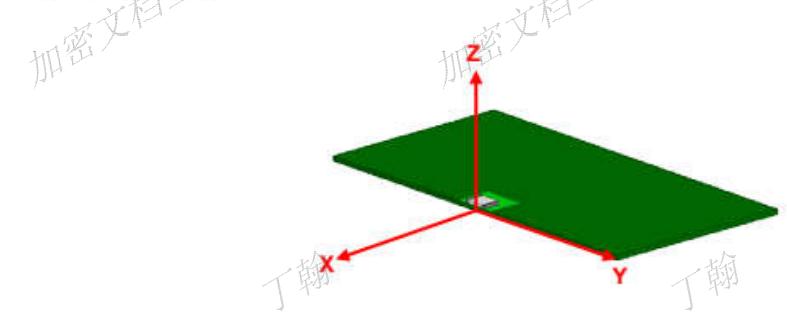
## Radiation Pattern

The Gain pattern is measured in INPAQ's FAR-field chamber. DUT is placed on the table of rotator, a standard horn antenna and Vector Network Analyzer is used to collect data.

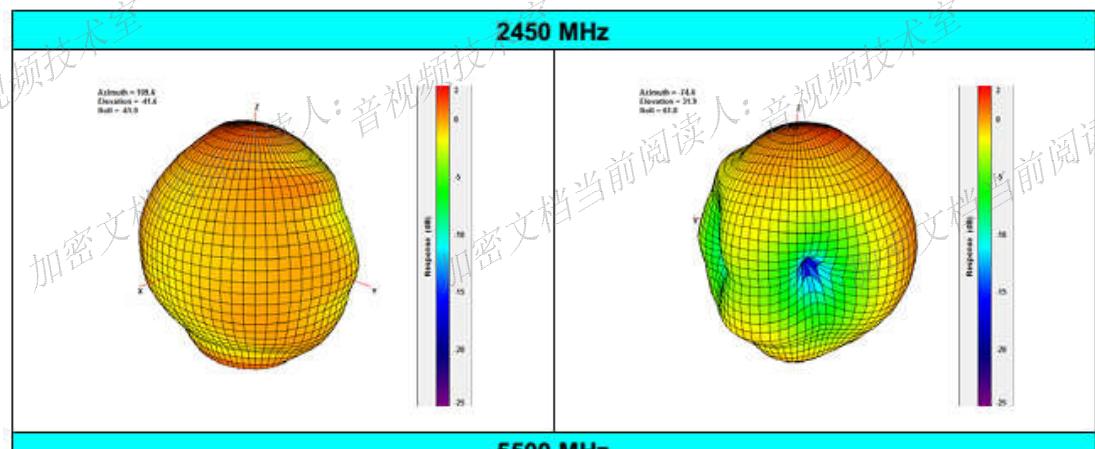


## 3D Chamber Definition

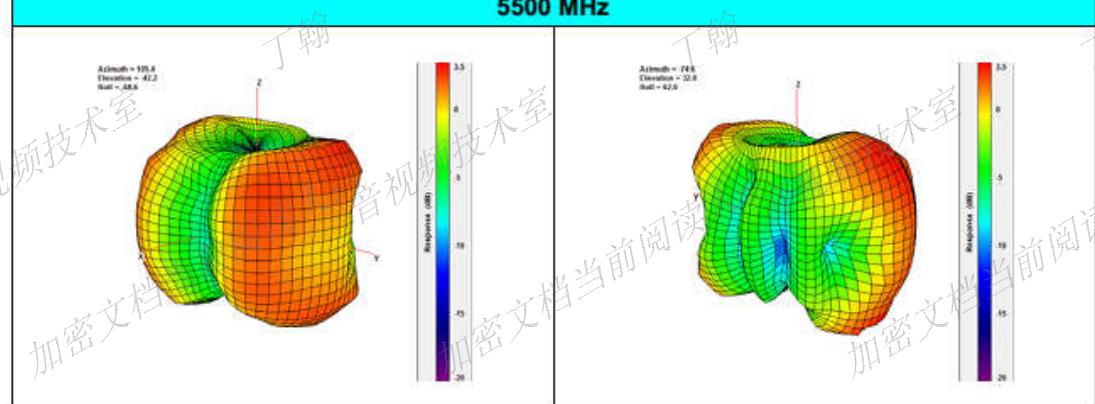
### 3D Gain Pattern



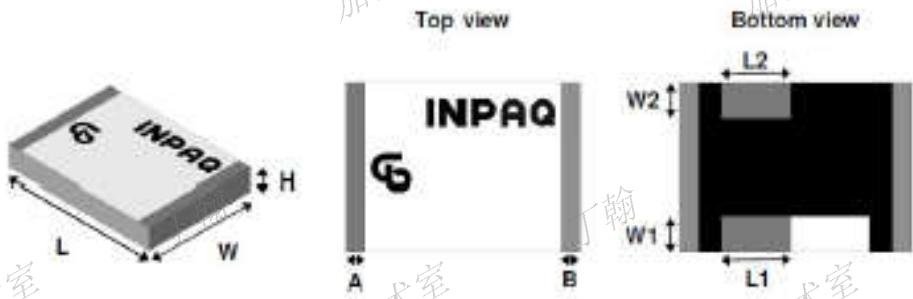
2450 MHz



5500 MHz



## 10. 制程能力指数 CPK



批號	第一批		第二批		
	NO	A 電極深度	B 電極深度	A 電極深度	B 電極深度
1		0.561	0.510	0.499	0.495
2		0.535	0.527	0.510	0.519
3		0.537	0.584	0.528	0.515
4		0.511	0.543	0.540	0.496
5		0.532	0.544	0.527	0.558
6		0.575	0.512	0.534	0.573
7		0.491	0.548	0.559	0.543
8		0.548	0.547	0.580	0.547
9		0.509	0.509	0.516	0.547
10		0.536	0.504	0.492	0.548
平均值( )		0.53	0.53	0.53	0.53
標準差( $\sigma$ )		0.02	0.02	0.03	0.03
$+ 3\sigma$		0.60	0.60	0.60	0.61
標準值		0.45	0.45	0.45	0.45
上限(UCL)		0.75	0.75	0.75	0.75
下限(LCL)		0.15	0.15	0.15	0.15
$C_a$		0.28	0.28	0.26	0.28
$C_p$		4.22	4.20	3.94	4.00
$C_{pk}$		3.04	3.04	2.91	2.88
建議結果		OK	OK	OK	OK

批號	第一批			第二批		
	NO	L	W	H	L	W
1	5.194	3.672	0.713	5.251	3.774	0.747
2	5.176	3.676	0.709	5.226	3.781	0.745
3	5.228	3.76	0.661	5.188	3.78	0.748
4	5.168	3.772	0.712	5.183	3.759	0.772
5	5.188	3.696	0.716	5.187	3.729	0.737
6	5.201	3.694	0.709	5.232	3.764	0.754
7	5.189	3.657	0.711	5.225	3.796	0.752
8	5.217	3.795	0.723	5.26	3.655	0.716
9	5.187	3.712	0.717	5.224	3.738	0.73
10	5.17	3.758	0.716	5.167	3.704	0.691
平均值( )	5.19	3.72	0.71	5.21	3.75	0.74
標準差( $\sigma$ )	0.02	0.05	0.02	0.03	0.04	0.02
+ 3 $\sigma$	5.25	3.86	0.76	5.30	3.87	0.80
標準值	5.20	3.70	0.70	5.20	3.70	0.70
上限(UCL)	5.450	3.950	0.850	5.450	3.950	0.850
下限(LCL)	4.950	3.450	0.550	4.950	3.450	0.550
C <sub>a</sub>	0.03	0.08	0.06	0.06	0.19	0.26
C <sub>p</sub>	4.54	1.82	3.05	2.82	2.05	2.34
C <sub>pk</sub>	4.69	1.68	2.87	2.66	1.66	1.73
建議結果	OK	OK	OK	OK	OK	OK

## 11.不使用有害物质保证书

要求零部件所用原材料、包装材料等，必须符合海信 Q/RSAG J15.002 化学物质限制要求。



## CERTIFICATE OF COMPLIANCE

This letter is to confirmation that all component product(s) fully  
comply with the

1. European Directive 2011/65/EU and (EU)2015/853
2. Halogen free(Br<900ppm,Cl<900ppm,Br+Cl<1500ppm)

The undersigned is an authorized representative of our company

Company Name: INPAQ TECHNOLOGY CO.,LTD. CHUNAN BRANCH

Company Address: No. 11, Ke-Yi St., Chunan, Miaoli 350, Taiwan

Authorized person's name and Position: Shan Pu Yu / QA Director

Signature: 

Date: 2016/7/20

12. 附件：相关检测/认证报告

海信  
ACM3-5036-A1-CC-S

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音视频技术室

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音视频技术室

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