

## Shenzhen Anwei Wireless Technology Co., Ltd

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## APPROVAL SHEET

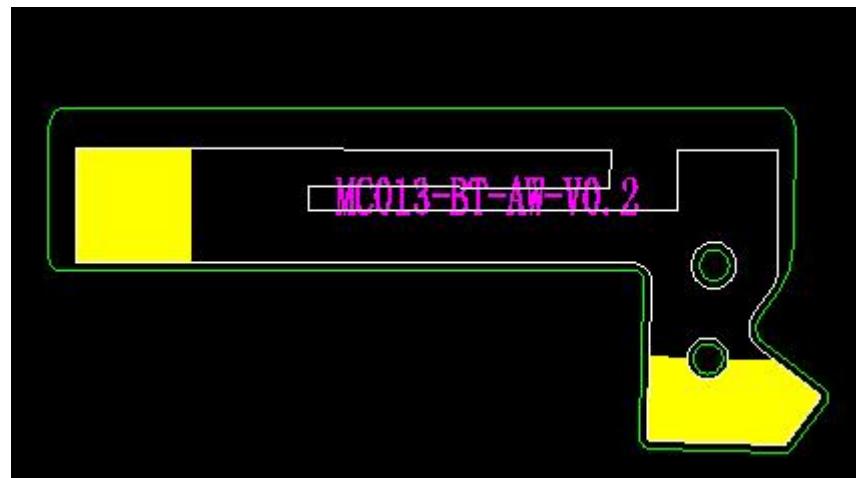
Customer		Specs	MC013
Part Number	AW006-MC013-021-A0	Frequency Band	2.4G-BT
Color	BLACK	Edition	REV:A0
Salesperson	XIE	Design	宋兵伟
Structure	QIN	Confirm	
Date	2024.12.25	Signing Date	
Customer confirmation:			
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## catalog

I. Product specifications.....	3
II. Electrical performance.....	3
1. Specifications.....	3
2. Matching circuit of the antenna.....	3
III. Testing of parameters.....	4
1. Setup ..... for the test	4
2. Test Results.....	4
4. Setup of active testing.....	4
1. The venue for the test.....	4
2. Results of the test...	4
V. Recommendations and conclusions.....	6
6. Structural drawings.....	6
7. Packing method.....	8

### 一、 Product Specifications

The report mainly provides the parameter test of MC013 antenna performance. The MC013 antenna is a BT antenna.



1. Specification standard 2400-2480mhz, resonant in this band.

2. Antenna matching circuit

Antenna structure: FPC

Matching circuit (Matching circuit)

(The accuracy of the matching value is recommended to be higher)

### 三、 Testing of parameters

## 1.

VSWR The test devices are in sequence connected to:



Treatment of test instruments:

Use a hard cable to lead out the SMA-J connector from the antenna 50 ohm test point on the mobile phone PCB, connect it to the copper tube with a choke, and then connect to other devices in turn.

## 2. Test results.

Everything is fine.

## 四、 Setup for a source test

The source test devices are connected in sequence as:



### 1. The venue for the test

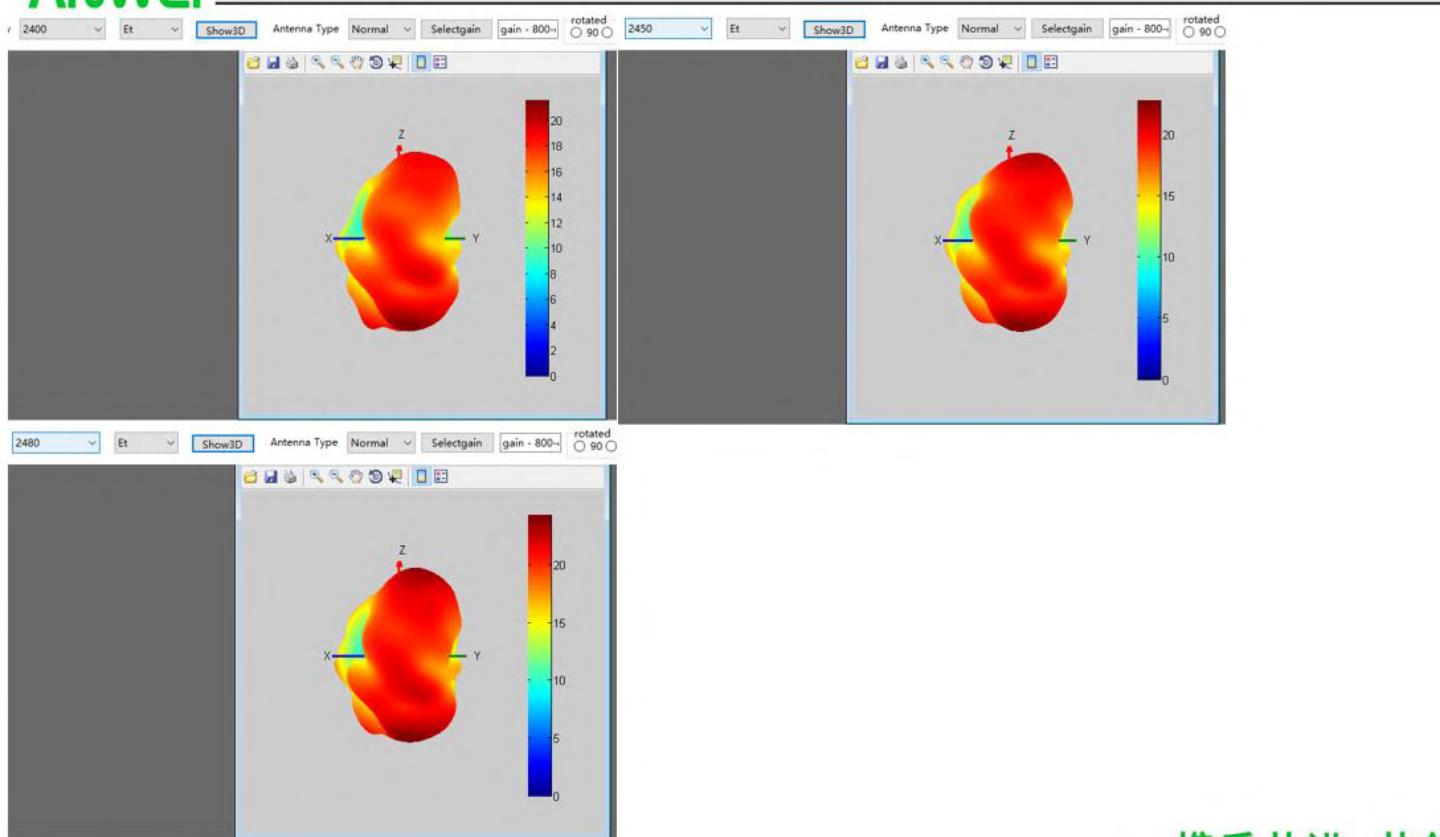
AW microwave anechoic chamber: the test frequency range is 400MHz to 6GHz, the quiet area is 40cm circumference, the reflectivity is less than -90dB.

### 2. The results of the test.

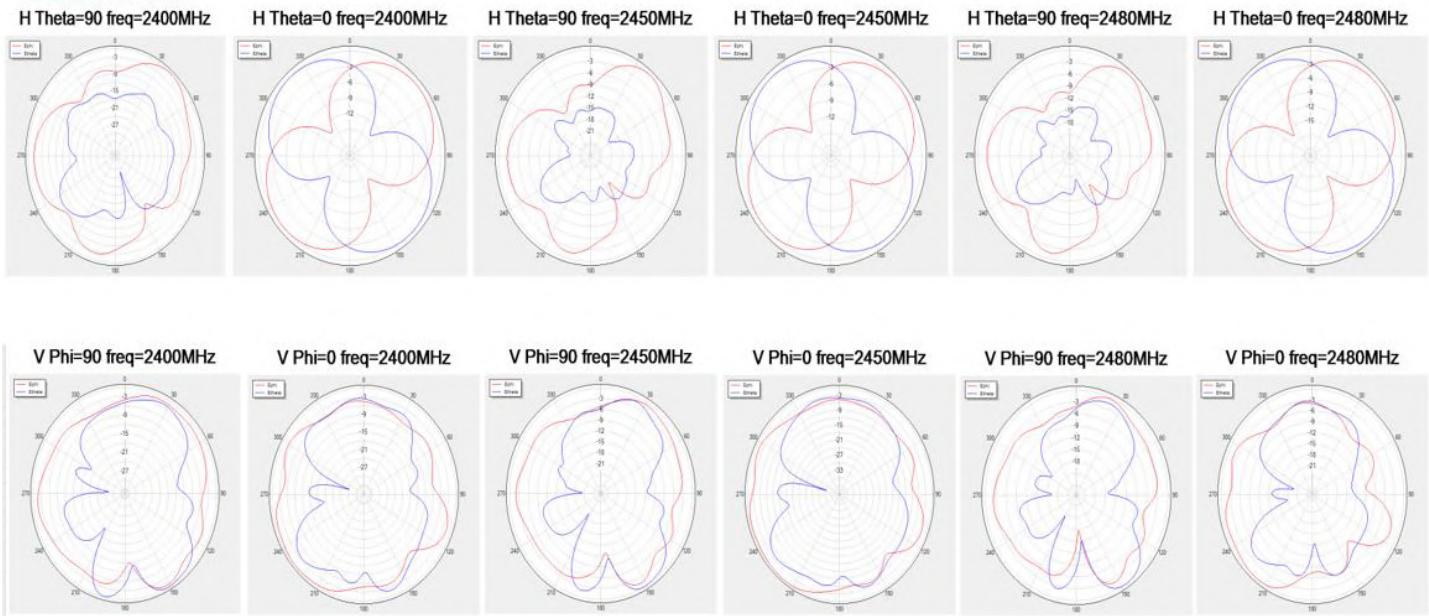
The following is the MC013 project BT antenna test results:

Gain&Efficiency			
frequency (MHz)	gain (dBi)	efficiency (dBi)	efficiency (%)
2400	-0.11	-6.04	24.90
2410	-0.03	-5.81	26.26
2420	0.17	-5.49	28.27
2430	-0.07	-5.82	26.16
2440	0.07	-5.71	26.86
2450	0.02	-5.71	26.86
2460	0.43	-5.4	28.82
2470	-0.06	-5.79	26.37
2480	-0.14	-5.69	26.98

3D



2D



## 五、Recommendations and conclusions

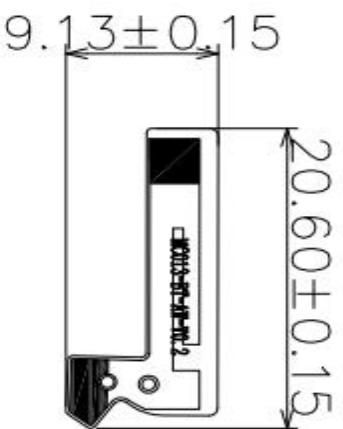
This report is measured based on the performance of the antenna electrical equipment provided by the customer, and your company is requested to review it carefully.

## 六、Structure drawings



丝印白色亮光字码

半切模整版出货

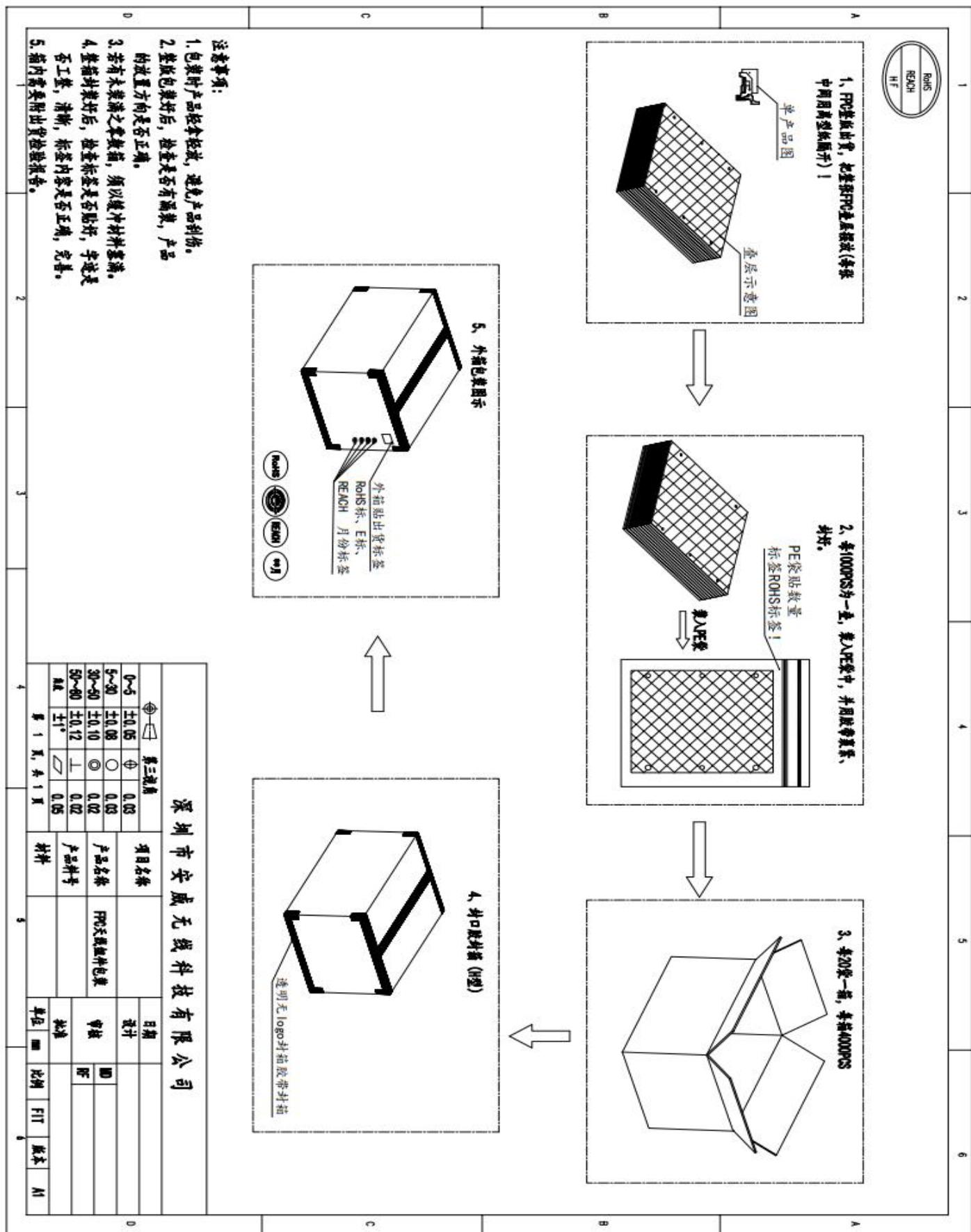


技术要求：1对半材料

- 1、绿色为外形轮廓，白色填充部位为电气走线覆铜；
- 2、基材材质为聚酰亚胺或聚酯薄膜；
- 3、图示为正面、反面背胶，此PCB背胶3M0013R (9471LE)；
- 4、打均为公差尺寸及重点尺寸，铜箔线路所有尺寸公差不超过 $\pm 0.05$ ，  
掩埋冲出外型尺寸公差不超过 $\pm 0.1$ ，未注尺寸以圆形为准；
- 5、基材 $25\mu\text{m}$ ，铜箔 $18\mu\text{m}$ ，镀银 $1.5\text{~}3.0\text{~}6\text{~}10\text{~}15\mu\text{m}$ ，  
走线除焊盘外其它区域表面亚光黑色；
- 6、可靠性测试：盐水喷雾试验 $48\text{h}$ 、拉力摩擦测试（100个循环）、耐温、恒温恒湿试验、冷热冲击试验（12个循环）、附着力测试、金手指引脚弯曲测试；
- 7、出现下列问题均视为不合格：起泡分层、爆铜、折弯、折裂、边缘毛边、虚焊、包装运输、防潮、表面干净，完好无破损。

深圳市安威无线科技有限公司

深圳市安威无线科技有限公司						
第三视角		项目名称	MC013	日期	2025-01-06	
0°~10°	±0.05	⊕	0.03	设计		
10°~30°	±0.10	○	0.03	审核	W	QUL
30°~50°	±0.15	◎	0.02	复核	RF	SW
50°~80°	±0.20	—	0.02	批准		
角度	±1°	△	0.05			
第1页, 共1页		材 质	FPC			
		单 位	mm	比 例	1:10	版 本
					A1	



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