



Shenzhen Lejin radio frequency technology Co., LTD

## SPECIFICATIONS FOR APPROVAL

Customer Name: 深圳金亚太科技有限公司

Product Name: 2.4GHz/5GHz 天线

Product Model: ATV586MAX/APC395X3

Part Number: LJF02-20092203-R0A

Write By : 胡雪文

Issued Date: 2020-09-22

### CUSTOMER

ENGINEER R&D DEPT	BUSSINESS DEPT	APPROVAL

### LEJIN

R&D DEPT	ENGINEER DEPT	APPROVAL

REV	MODIFIED DESCRIPTION	DATE	REMARK
V1.0	Initial Draft Release	2020/09/22	
V1.1	Support new model APC395X3	2021/06/29	
V1.2	Add radiation pattern	2024/10/28	



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[illegible]

### 3.Product Specification

A. Electrical Characteristics	
Frequency	2400MHz ~2500 MHz 5150MHz ~5850 MHz
VSWR	<2.0
Efficiency	≥40%
Impedance	50Ohm
Polarization	Linear
Gain(2.4GHz)	≤1.82dBi
Gain(5.8GHz)	≤2.81dBi
B. Material & Mechanical Characteristics	
Material of Radiator	FPC(Yellow),LJWF20L
Cable Type	Φ1.13mm,L110mm,Black
Connector Type	IPX1
Dimension	26.0mm*21.5mm
C. Environmental	
Operation Temperature	- 20 °C ~ + 70 °C
Storage Temperature	- 30 °C ~ + 85 °C
Humidity	40%~95%

### 4.Test Equipment & Conditions

- |                                  |                     |
|----------------------------------|---------------------|
| 1.Network Analyzers              | Agilent 8753D/5071C |
| 2.HSPA and LTE protocol test set | R&S CMW500 -PT      |
| 3.Communications Test Set        | Agilent 8960        |
| 4.3D Chamber Test System         |                     |

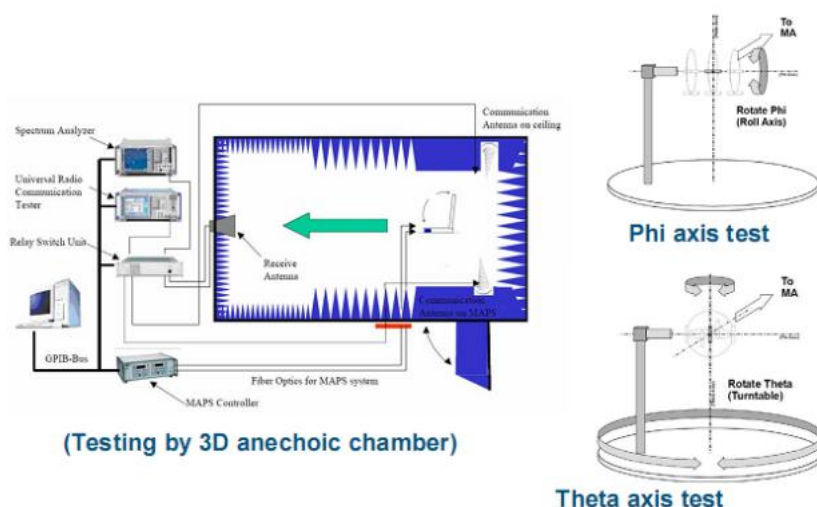


Chart 1 Test topology



## 5.Test Report

### 5.1 Voltage Standing Wave Ratio(VSWR).

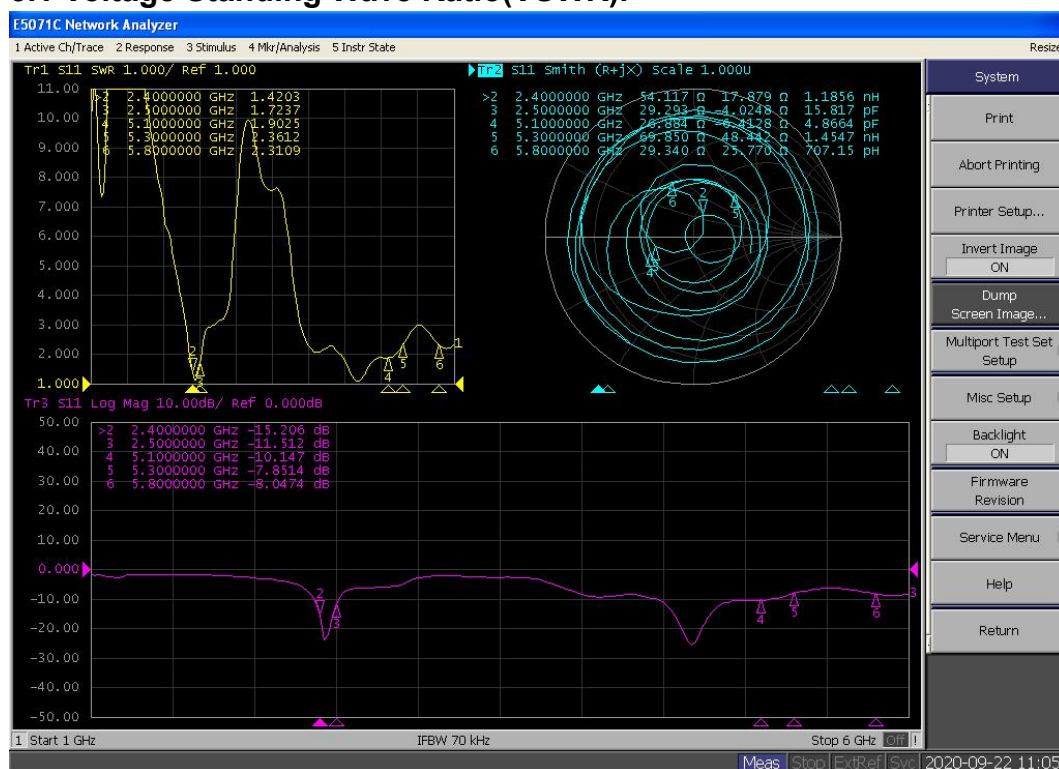


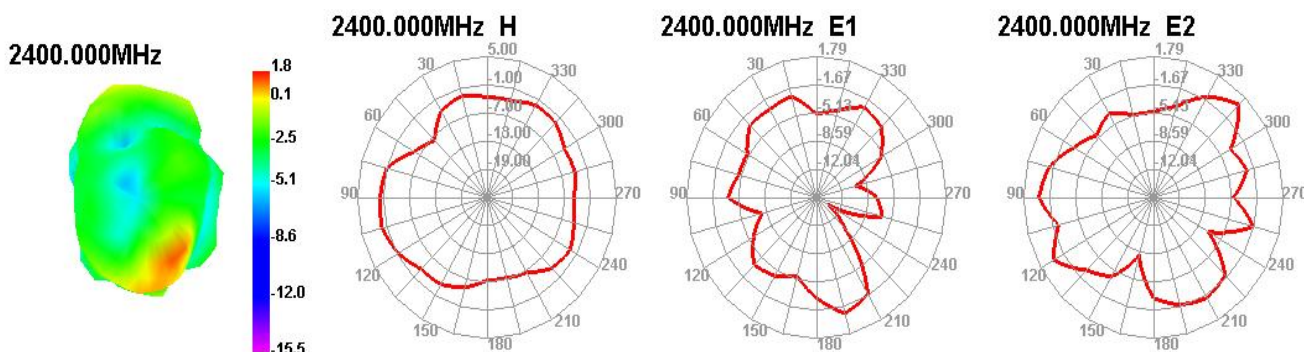
Chart 2 VSWR

### 5.2 Efficient and gain.

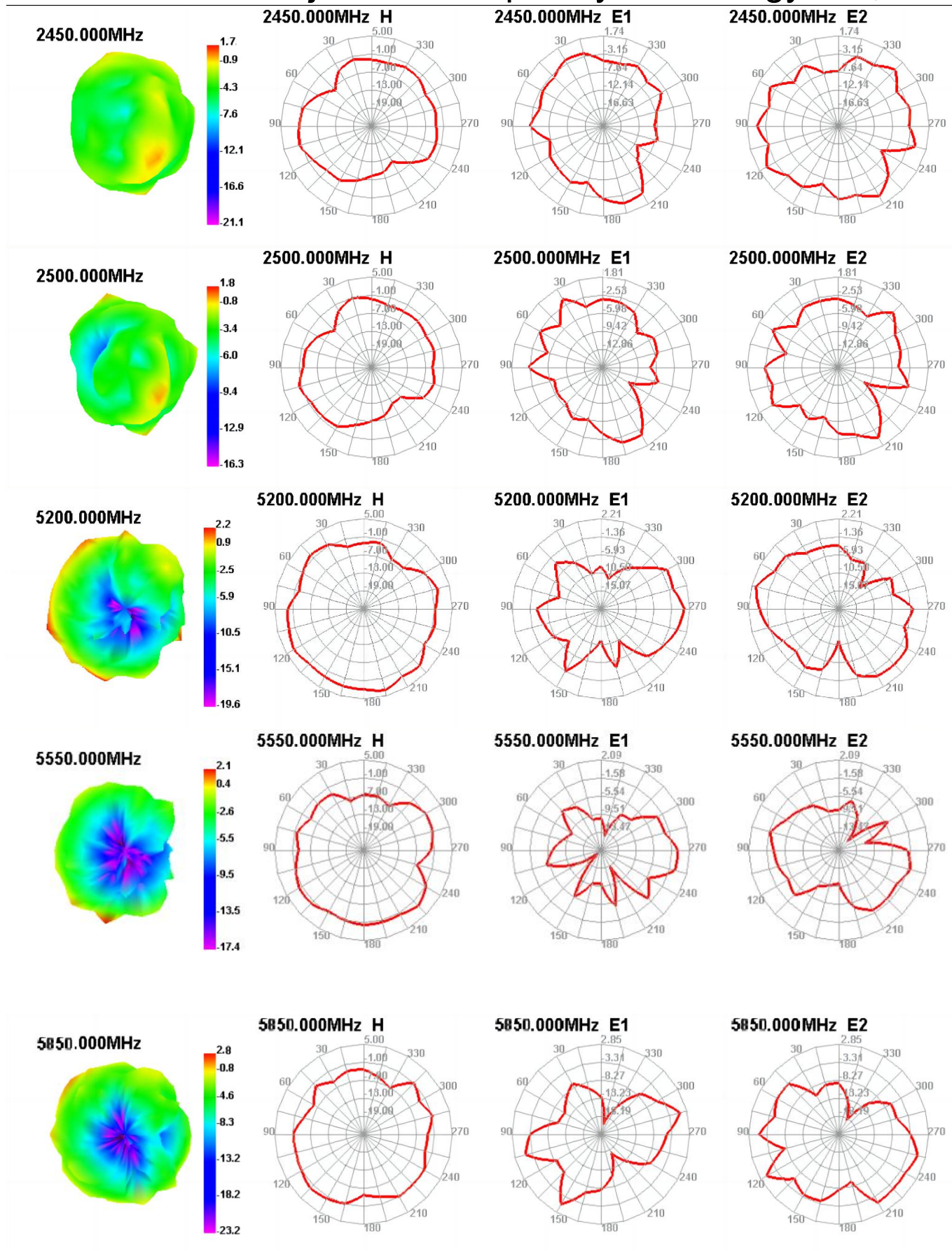
Passive Test	Freq(MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
2.4GHz	Effi(%)	52.18	45.17	44.40	46.98	50.61	49.28	48.90	51.86	50.60	45.73	49.19
	Gain(dBi)	1.71	1.00	1.00	1.39	1.76	1.67	1.66	1.82	1.77	1.32	1.78

Passive Test	Freq(MHz)	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850
For 5G	Effi(%)	44.83	46.18	46.12	46.21	46.36	44.38	44.11	44.91	45.67	45.82	45.99	46.75	46.90	43.18	45.54
	Gain(dBi)	2.66	2.13	2.41	2.39	2.62	2.27	2.55	2.09	2.00	2.72	2.08	2.62	2.21	2.07	2.81

### 5.3 Radiation pattern.









## 6. Reliability Test

Test Item		Test condition	Equipment	Specification	Result
1	Low Temp. Storage Test	Temperature: -30℃, Time: 48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-down the temp. to -30℃ in one hour, store antenna for 44 hours; step-up temp to 25℃, test antenna after 2 hours.	Temp. & Humi. Tester	No material deformation is allowed. Electronic Performance is ok.	PASS
2	High Temp./High Humid Storage Test	Temperature: 85℃ Humidity: 85% RH Time: 48hrs Test condition: Placing antenna in a Low/High Temperature Chamber, keep the temp is 25℃ and humidity is 65% for one hour, then step-up the temp. to 80℃ and the humidity up to 85% in one hour, store antenna for 44 hours; step-down temp to 25℃, test antenna after 2 hours.	Temp. & Humi. Tester	No material deformation is allowed. Electronic Performance is ok.	PASS
3	Salt-Spray 6 pray Test	Placing antenna in the Salt-Spray Tester, set the test condition, Temp: $35 \pm 2^\circ\text{C}$ Humidity: 85% NaCl salt spray: $5 \pm 1\%$ . PH value: 6.5~7.2 Testtime: 24 hours	Salt-Spray Tester	No color change No appearance rusting	PASS

## 7. Assemble type

## 8. Product Drawing



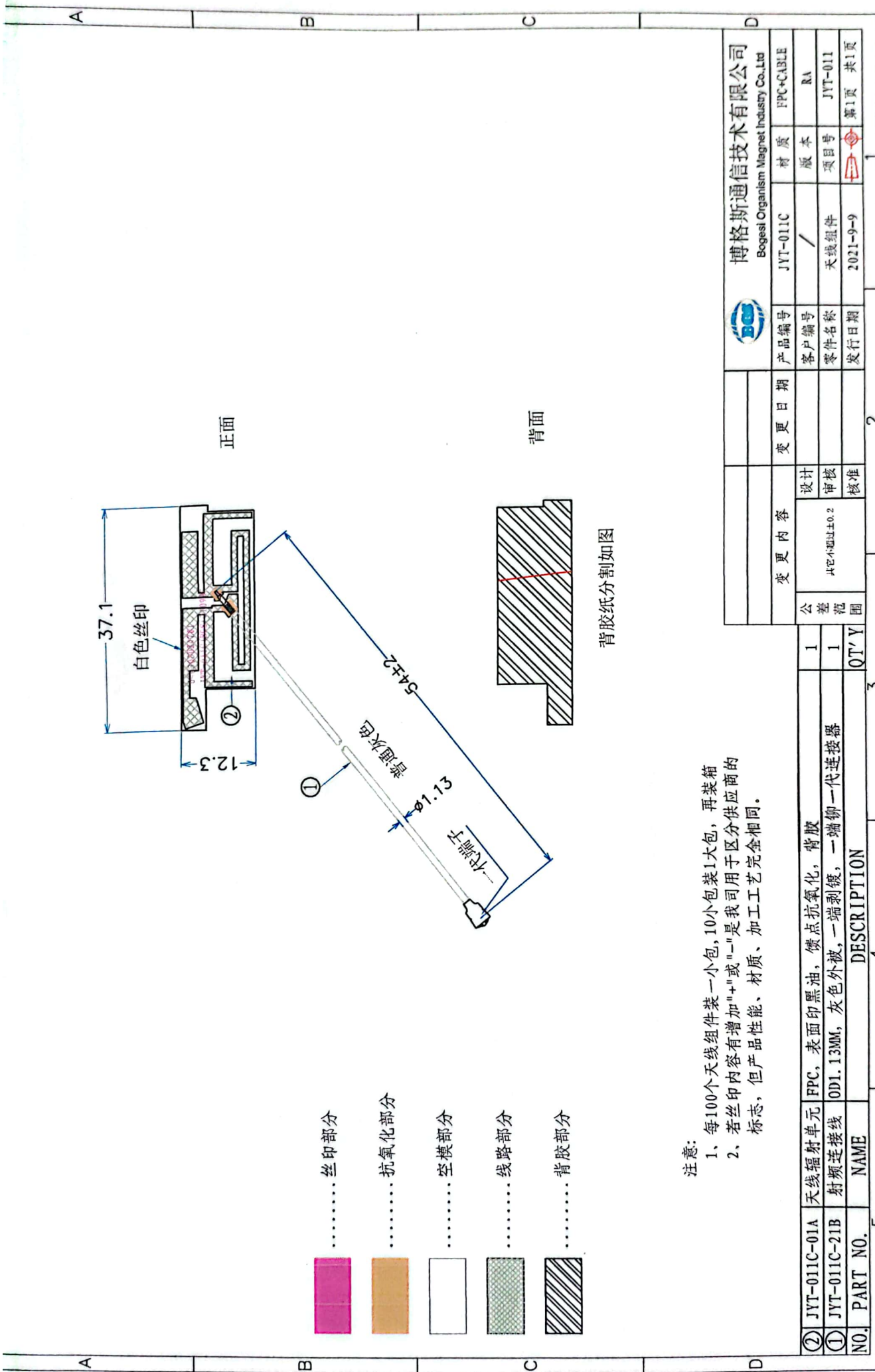
深圳市博格斯通信技术有限公司  
shenzhen bogesi communication technology co., ltd

样品图片:



扫描全能王 创建





注意:

- 1、每100个天线组件装一小包, 10小包装1大包, 再装箱
- 2、若丝印内容有增加 "+" 或 "-" 是我司用于区分供应商的标志, 但产品性能、材质、加工工艺完全相同。

②	JYT-011C-01A	天线辐射单元	FPC, 表面印黑油, 镀点抗氧化, 背胶	1	1
①	JYT-011C-21B	射频连接线	OD1.13MM, 灰色外被, 一端剥皮, 一端铆一代连接器	1	1
NO.	PART NO.	NAME	DESCRIPTION	QT'	Y



博格斯通信技术有限公司  
Bogesi Organism Magnet Industry Co., Ltd.

变更内容	变更日期	产品编号	JYT-011C	材质	FPC+CABLE
公差	设计	客户编号	/	版本	RA
范围	审核	零件名称	天线组件	项目编号	JYT-011
	核准	发行日期	2021-9-9	第1页	共1页



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