

深圳市亿圣邦科技有限公司

样品承认书

SPECIFICATION FOR APPROVAL

公司名称 (客户填写): 深圳市昱科电子有限公司
物料代码 (客户填写): _____
规格型号 (客户填写): M810
承认日期 (客户填写): _____
供应商名称 (SLK 填写): 深圳市亿圣邦科技有限公司
供应商名称 (SLK 填写): WIFI/GPS:SLK-YK-1717

4G 小板:SLK-YK-P3405-R-195IV-B

4GMAIN:SLK-YK-8109

4GAUX:SLK-YK-1609D

承 认 签 章

供 应 商 承 认 (SLK 填写栏)

深圳市昱科电子有限公司

工 程 师

审 核

批 准

工 程 师

审 核

批 准

陈仕联

黄 震

林美财

盖章签署

盖章签署

日

期

2024-6-2

日

期

批示: ☐接受 ☐有条件接受

备注 (客户填写):

Shenzhen Yi Sheng Bang technology Co., LTD

101, Building C, Shenzhen Qianwan Hard Science and Technology
Industrial Park, Bao 'an District, Shenzhen, China

Phone : 18025305599

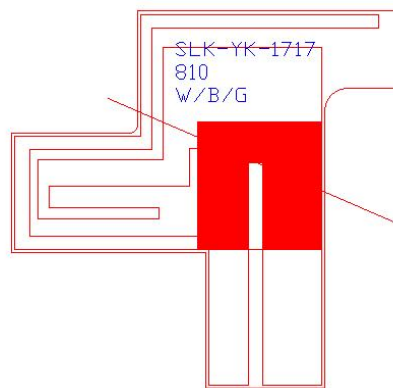
WIFI/GPS Antenna (1717)

1. Explanation of Product number :

S L K - Y K - 1 7 1 7

1

2



Product Code:

(1) Customer:

YK: 昱科

(2) Project:

8109: SLK-YK-8109 (WIFI /BT+GPS antenna)

2. Features

- *Stable and reliable in performances
- *Compact size
- *RoHS compliance

3. Applications

- * IEEE802.11 (a/b/g/n)
- * Hand-held devices when WIFI (802.11a/b/g/n) functions are needed

4. Description

Holy bond's FPC antenna series are specially designed for WIFI (802.11 a/b/g/n) GPS applications. Based on Holy bond's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

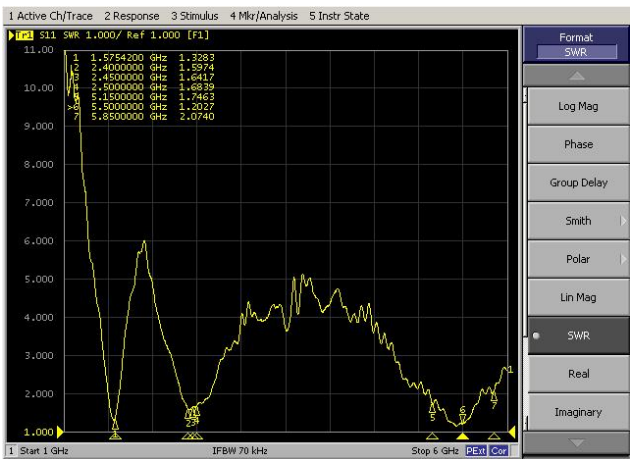
5. Electrical Specifications

5-1

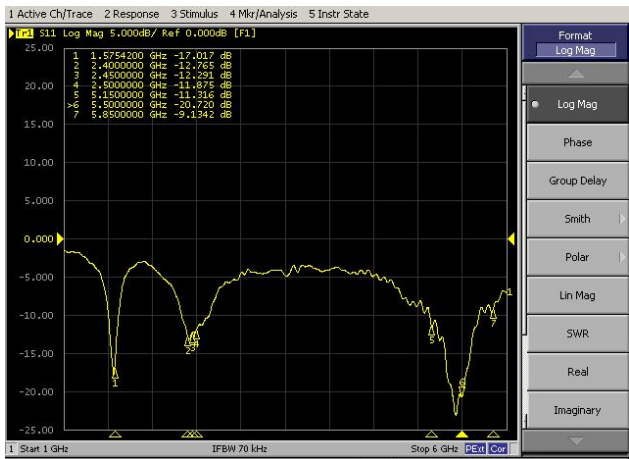
Characteristics	Specifications	Unit
Outline Dimensions	17.5x 17.05x 0.12	mm
Center Frequency	1.575-2.4-2.5-5.15-5.85	GHz
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	3max	

5-2

VSWR

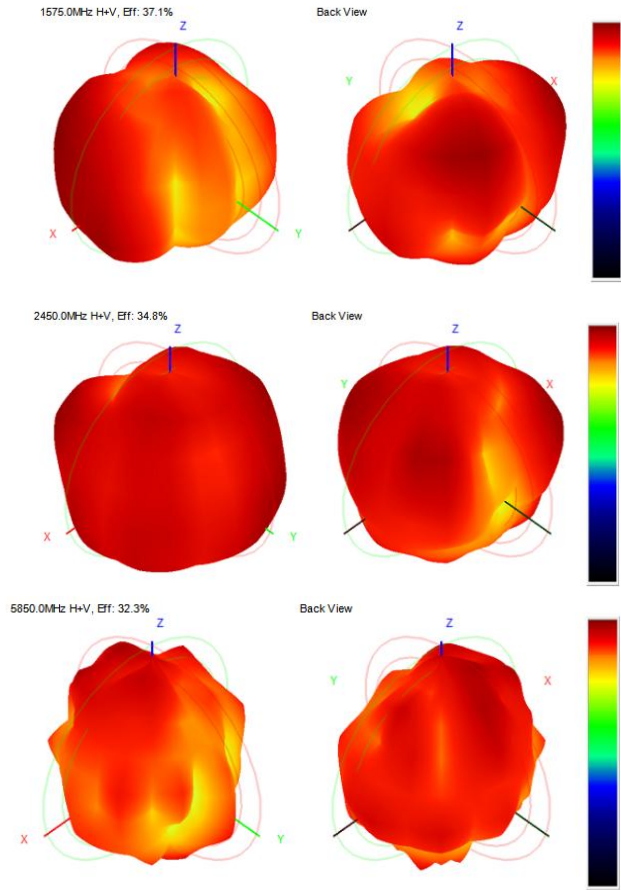


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5-3.WIFI/BT+GPSAntenna Gain/Efficiency/Radiation Pattern of 3D

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)	增益(dbi)
1570.0	-4.52	0.49	35.35	0.57
1575.0	-4.31	0.54	37.07	
1580.0	-4.30	0.57	37.16	
2400.0	-4.51	2.33	35.40	2.84
2410.0	-4.39	2.84	36.35	
2420.0	-4.42	2.63	36.18	
2430.0	-4.30	2.26	37.17	
2440.0	-4.55	2.53	35.05	
2450.0	-4.59	2.66	34.78	
2460.0	-4.44	2.51	36.00	
2470.0	-4.35	1.91	36.75	
2480.0	-4.13	2.62	38.61	
2490.0	-4.40	2.75	36.30	
2500.0	-4.46	2.06	35.79	
5150.0	-5.06	3.03	31.22	3.03
5350.0	-4.91	2.45	32.28	
5550.0	-4.85	2.54	32.76	
5750.0	-4.97	2.22	31.82	
5850.0	-4.91	2.42	32.26	



6. Antenna Dimensions (unit: mm)

文件编号		SLK-YK-1717		单位: mm		版次		标记		更改描述		日期	
						A1				新增物料		24-6-21	

绿色: PI基材, 厚度25μm
黄色: 覆铜, 厚度36μm
紫红色: 黑油, 厚度15μm
蓝色: 3M3002, 厚度50μm
蓝色: 3M3002, 厚度100μm

详细A 5/1

详细A

技术要求:

- 1、FPC基材: PI, 阴影部分为铜箔, 正表面上黑油。
- 2、背胶型号: 3M300。
- 3、红色部位铜外露, 表面无油污, 杂质, 毛刺等。
- 4、手撕位离型纸切断勿伤及线路。
- 5、重要尺寸用“*”标注(制作模具要控制, 模具验收必测);

设计	刘才亮		名 称	
审核	罗 涛		客户料号	
批准	黄 震		料 号	
		重量	数量	比例
				1:1
		第 1 张 共 1 张		
		图 号		

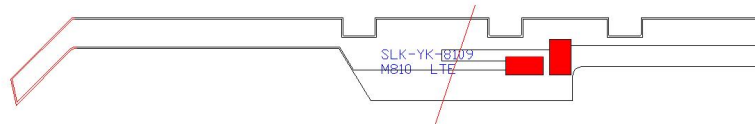
深圳市亿圣邦科技有限公司

4G MAIN Antenna (8109)

1.Explanation of Product number :

S L K - Y K - 8 1 0 9

1 2



Product Code:

(1) Customer:

YK: 昱科

(2) Project:

8109: SLK-YK-8109 (4G MAIN antenna)

备注： 配套SLK-YK-P3405-R-195IV-B小板

2. Features

- *Stable and reliable in performances
- *Compact size
- *RoHS compliance

3. Description

Holy bond's FPC antenna series are specially designed for 4G applications. Based on Holy bond's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

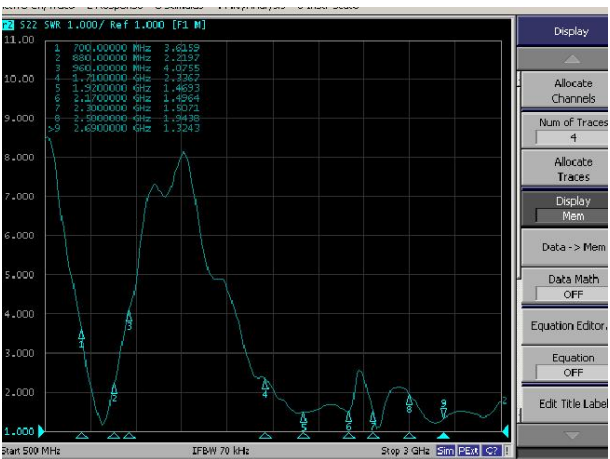
4. Electrical Specifications

4-1.

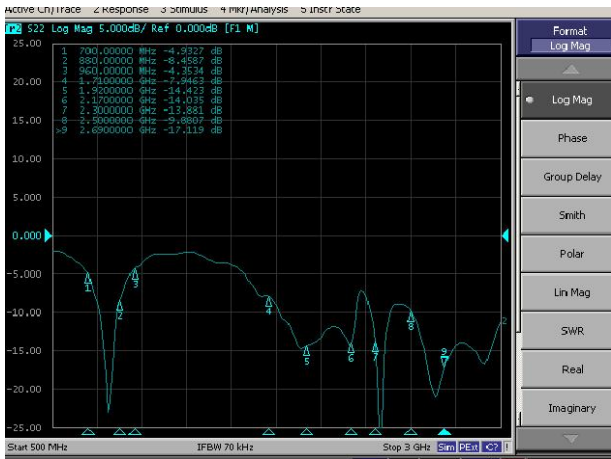
Characteristics	Specifications	Unit
Outline Dimensions	81.31x9 x 0.12	mm
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	5max	

4-2.

VSWR



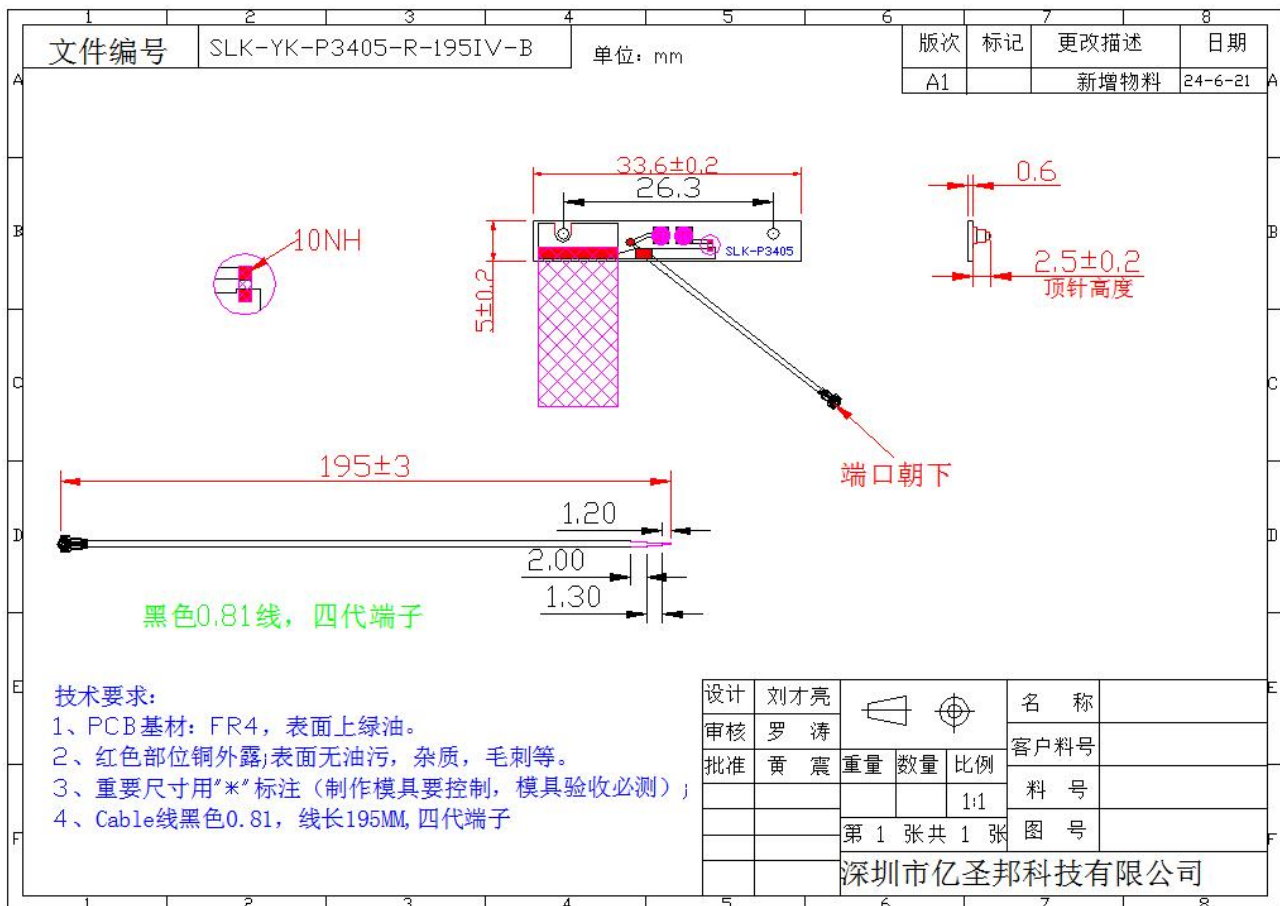
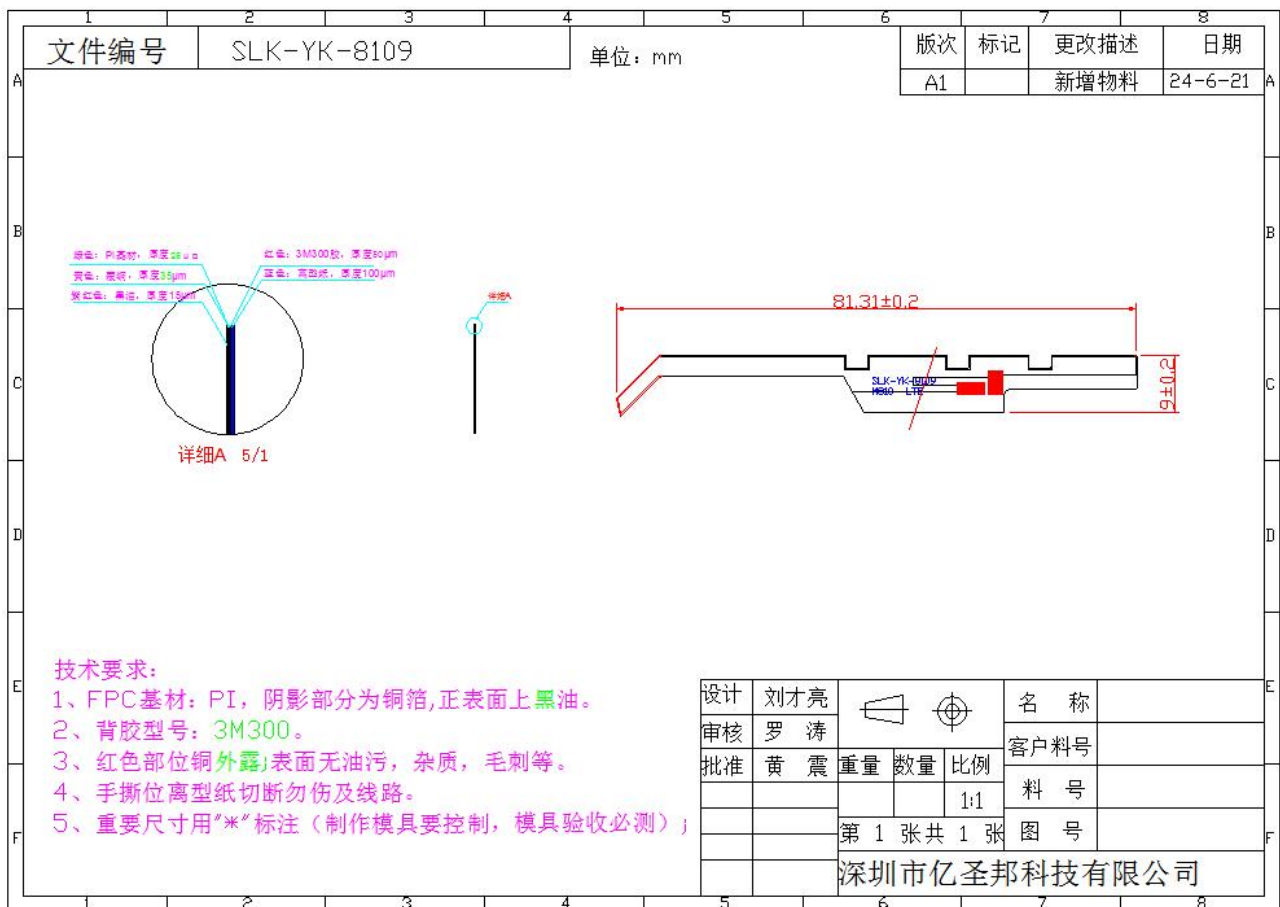
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4-3. 4G Antenna TRP/TIS

2G频段	LTE-L	LTE-M	LTE-R	TIS	增益 (dbi)
GSM850	27.14	26.87	26.86	-102.05	0.8
GSM900	27.4	27.63	26.41	-102.41	0.9
GSM1800	24.46	24.45	24.52	-102.41	1.1
GSM1900	24.07	24.85	24.14	-102.85	1.3
3G频段	LTE-L	LTE-M	LTE-R	TIS	增益 (dbi)
WCDMA-B1	17.42	16.35	16.69	-103.37	1.4
WCDMA-B2	18.9	18.63	18.55	-103.12	1.3
WCDMA-B4	18.3	18.72	18.63	-103.63	1
WCDMA-B5	18.33	18.96	19.22	-103.29	0.8
WCDMA-B8	17.85	17.68	17.27	-102.44	0.9
4G频段	LTE-L	LTE-M	LTE-R	TIS	增益 (dbi)
LTE-1	18.72	18.17	17.11	-92.31	1.4
LTE-2	18.49	18.99	19.5	-91.55	1.3
LTE-3	18.9	18.33	18.95	-92.28	1
LTE-4	18.18	18.2	17.72	-88.89	1
LTE-5	17.23	17.18	17.11	-88.44	0.8
LTE-7	18.4	17.79	17.67	-90.41	1.6
LTE-8	16.9	17.05	16.78	-89.27	0.9
LTE-20	18.81	18.24	17.52	-90.17	0.9
LTE-28	15.18	16.08	16.04	-90.59	0.7
LTE-38	18.43	18.41	17.66	-90.13	1.6
LTE-40	19.5	19.34	18.9	-92.56	1.5
LTE-41	17.54	18.09	17.07	-89.65	1.6
LTE-66	18.29	18.08	18.6	-91.66	1.1

5. Antenna Dimensions (unit: mm)

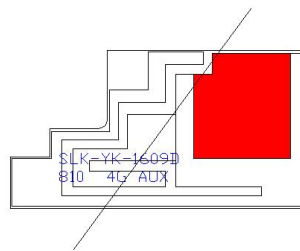


4G AUX Antenna (1609D)

1. Explanation of Product number :

S L K - Y K - 1 6 0 9 D

1 2



Product Code:

(1) Customer:

YK: 昱科

(2) Project:

1609D: SLK-YK-1609D (4G AUX antenna)

2. Features

- *Stable and reliable in performances
- *Compact size
- *RoHS compliance

3. Description

Holy bond's FPC antenna series are specially designed for 4G applications. Based on Holy bond's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

4. Electrical Specifications

4-1

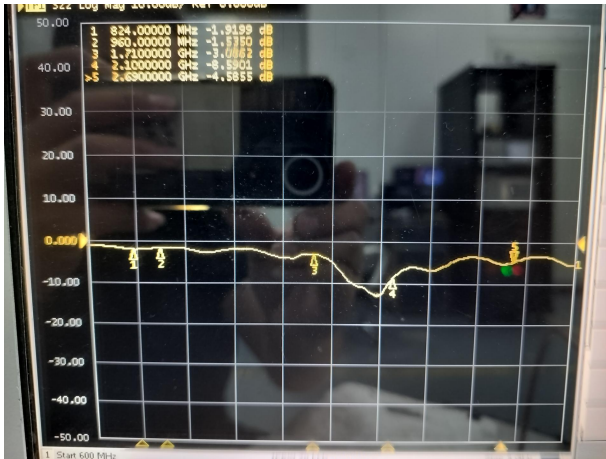
Characteristics	Specifications	Unit
Outline Dimensions	16.89x 8.95x 0.12	mm
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	5max	

4-2

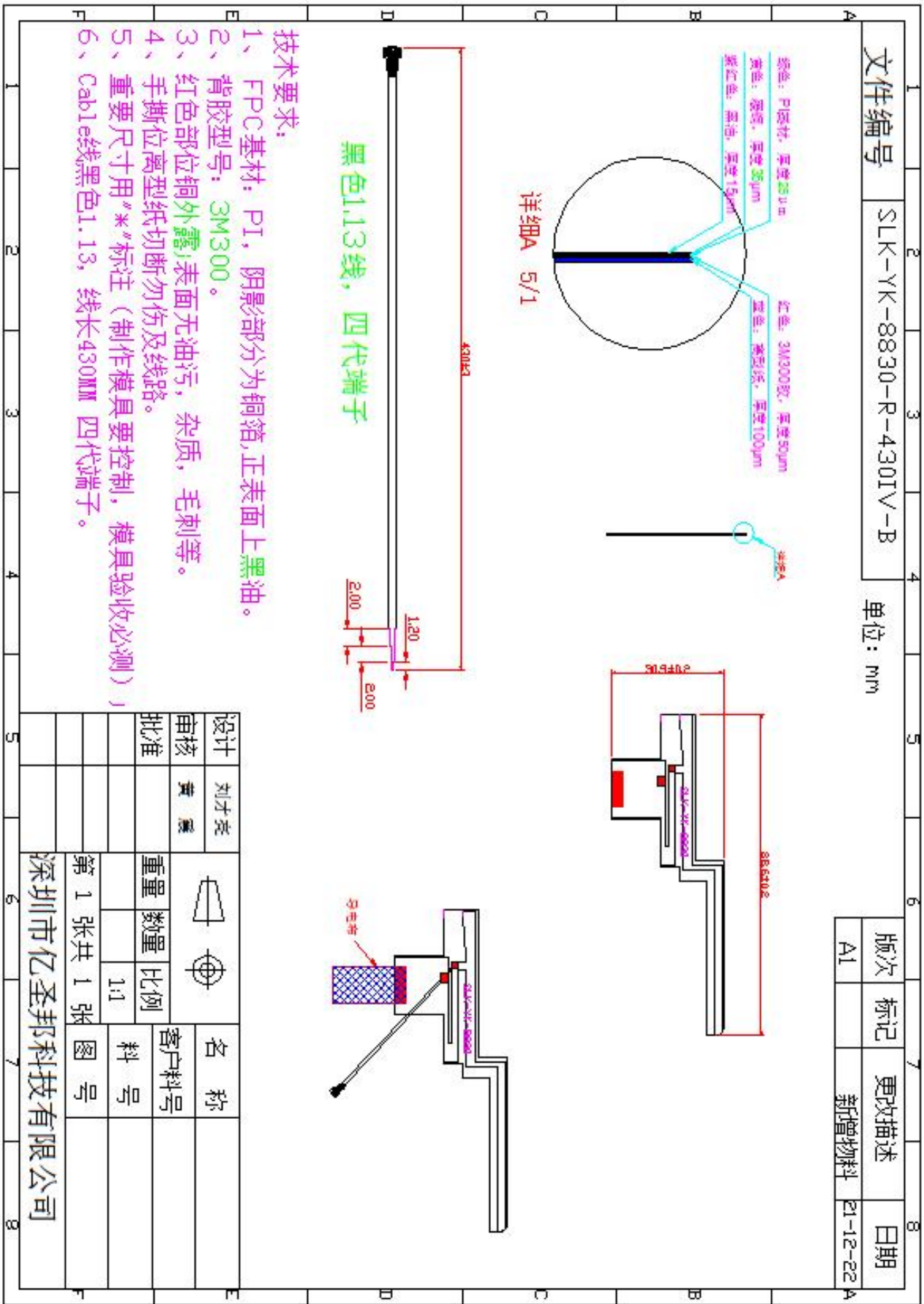
VSWR



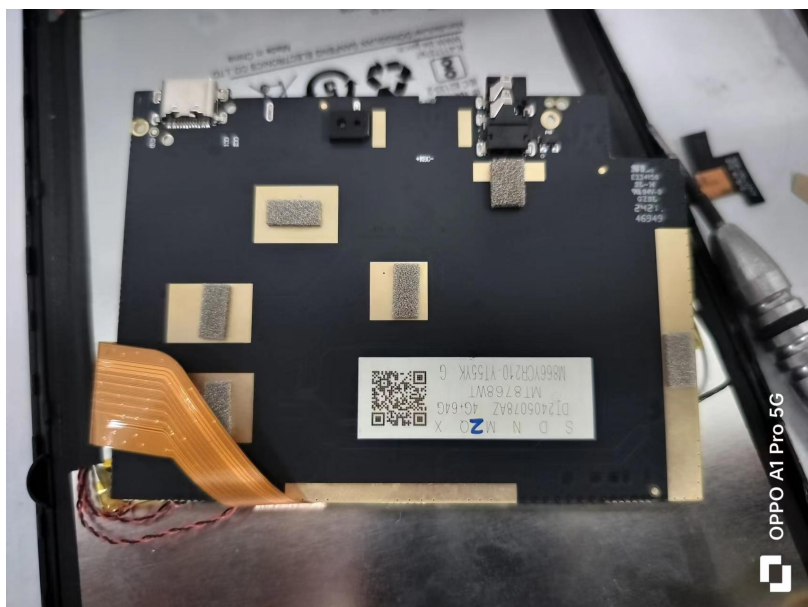
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5. Antenna Dimensions (unit: mm)



6. Antenna Picture



如图所示：

- 1.屏排线拉一块导电布包起来屏蔽干扰处理
- 2.主板屏蔽分别拉2块导电布连接起来，再与屏接地处理
- 3.主板底部环境处理：在主板底部漏铜区贴6块导电海绵与屏接地处理



4G Main Antenna



4G Div. Antenna



WIFI/GPS Antenna