

# 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	024-6-2		日 期		
批示: <input type="checkbox"/> 接受 <input type="checkbox"/> 有条件接受					
备注 (客户填写):					

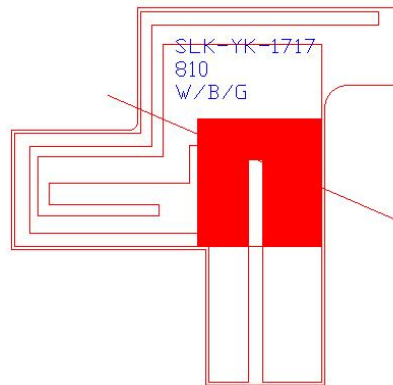
Shenzhen Yi Sheng Bang technology Co., LTD  
101, Building C, Shenzhen Qianwan Hard Science and Technology  
Industrial Park, Bao 'an District, Shenzhen, China  
Phone : 18025305599

# 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.

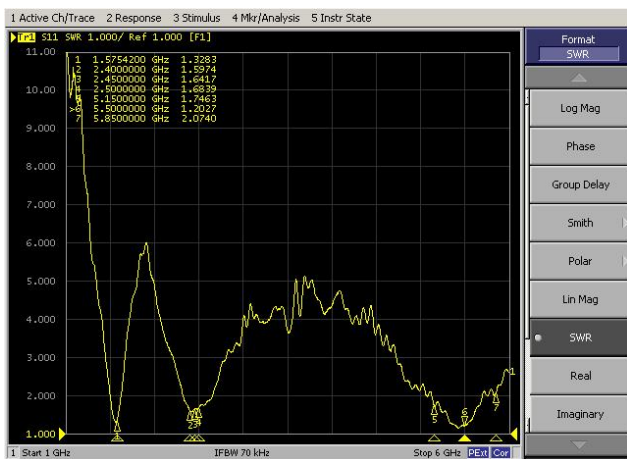
## 5. Electrical Specifications

### 5-1

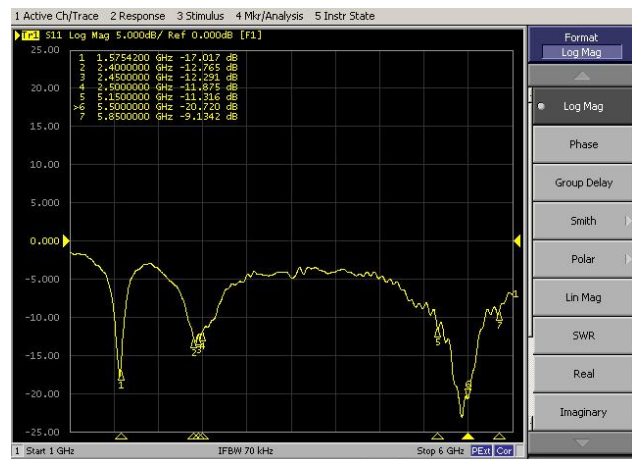
Characteristics	Specifications	Unit
Outline Dimensions	17.5x 17.05x 0.12	mm
Center Frequency	1.575-2.4-2.5-5.15-5.85	GHz
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	3max	

### 5-2

#### VSWR

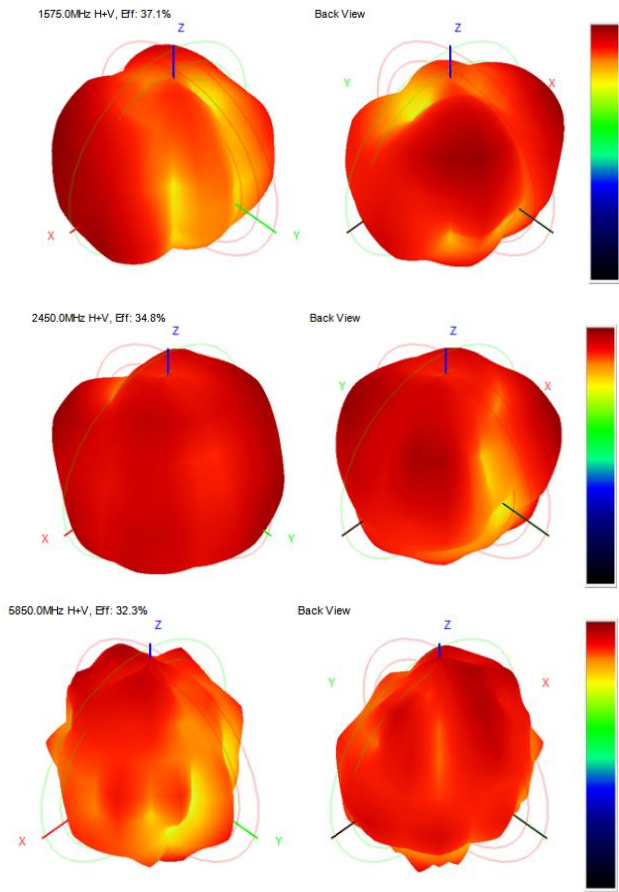


#### S11

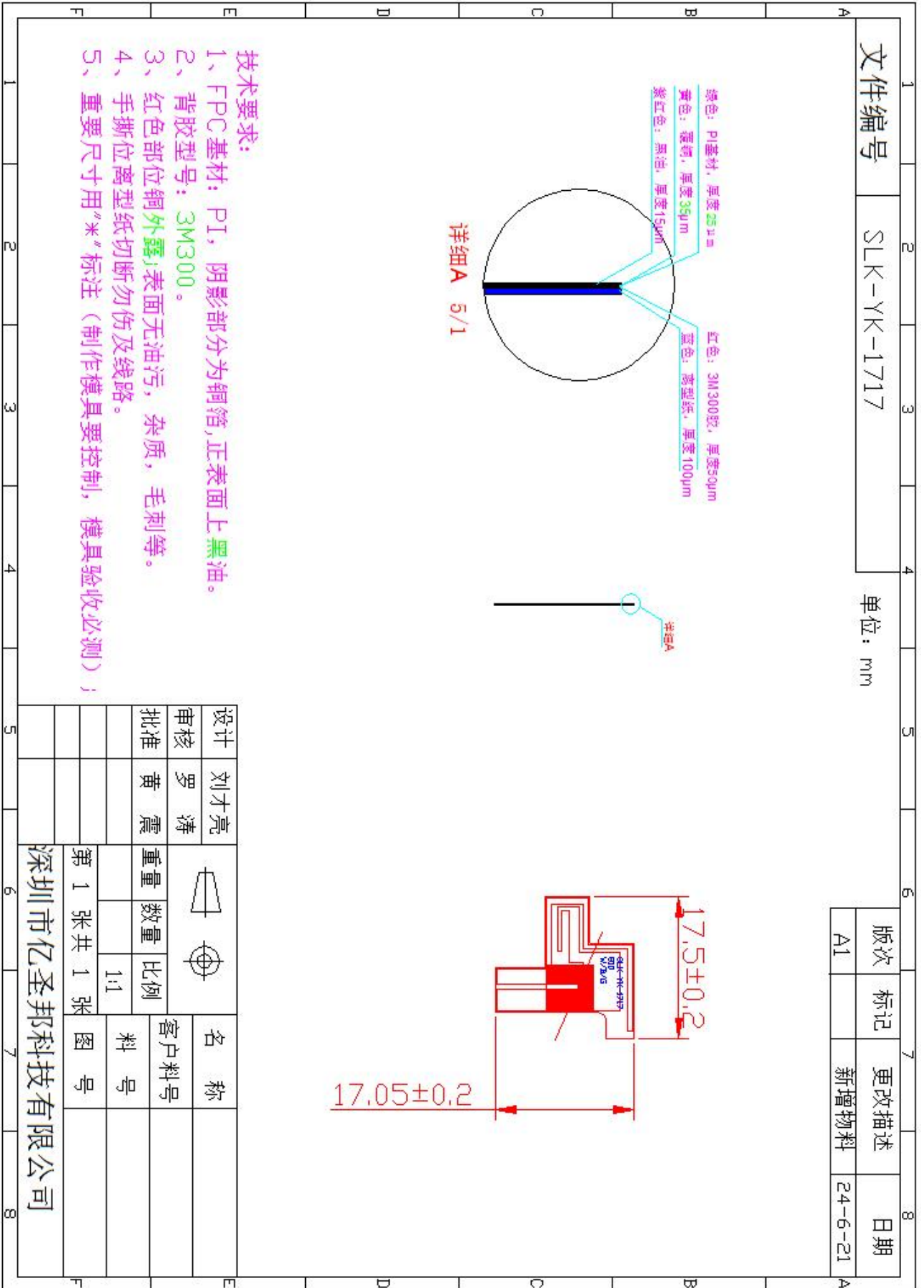


### 5-3.WIFI/BT+GPSAntenna Gain/Efficiency/Radiation Pattern of 3D

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	3.03
5150.0	-5.06	3.03	31.22	
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)

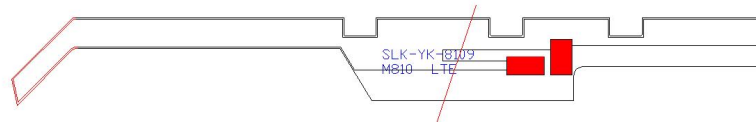


# 4G MAIN Antenna (8109)

## 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.

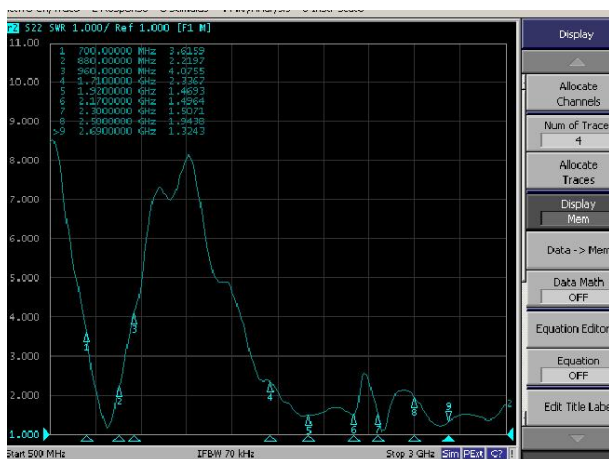
## 4. Electrical Specifications

### 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



#### S11

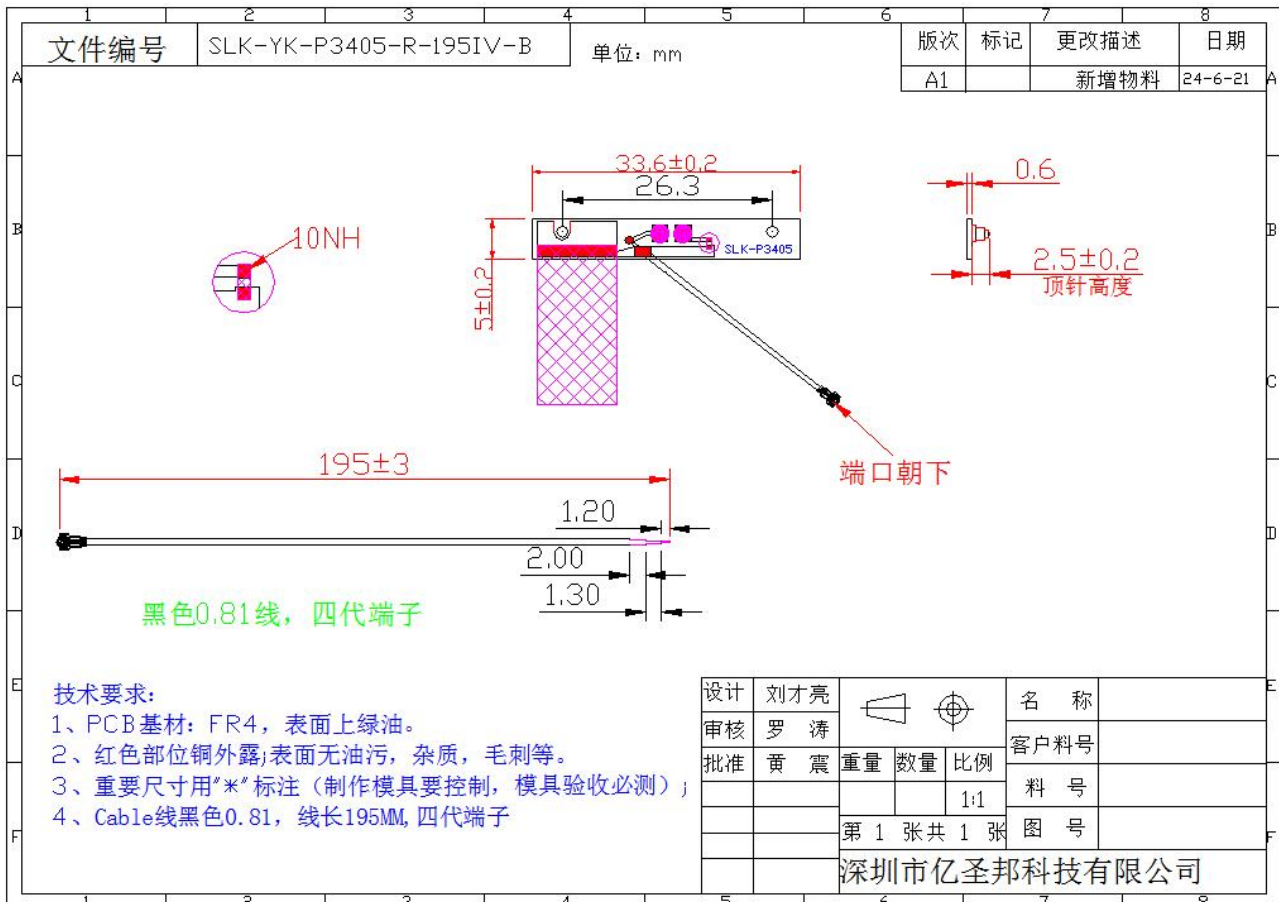
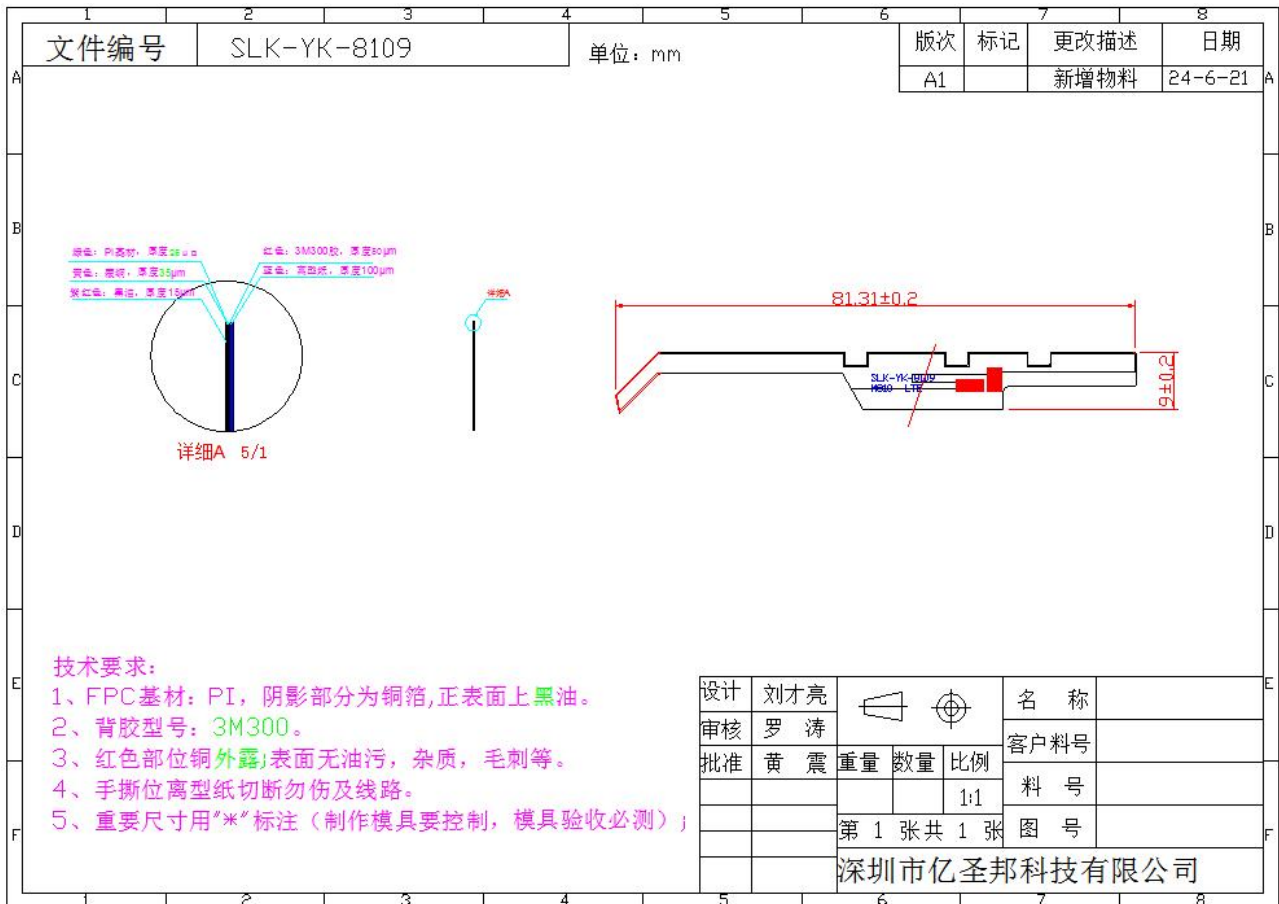


### 4-3. 4G Antenna TRP/TIS

<b>2G频段</b>	<b>LTE-L</b>	<b>LTE-M</b>	<b>LTE-R</b>	<b>TIS</b>	<b>增益 (dbi)</b>
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
<b>3G频段</b>	<b>LTE-L</b>	<b>LTE-M</b>	<b>LTE-R</b>	<b>TIS</b>	<b>增益 (dbi)</b>
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
<b>4G频段</b>	<b>LTE-L</b>	<b>LTE-M</b>	<b>LTE-R</b>	<b>TIS</b>	<b>增益 (dbi)</b>
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)

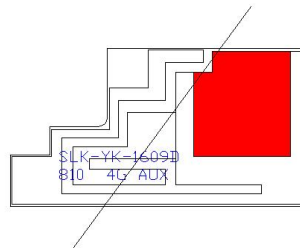


# 4G AUX Antenna (1609D)

## 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.

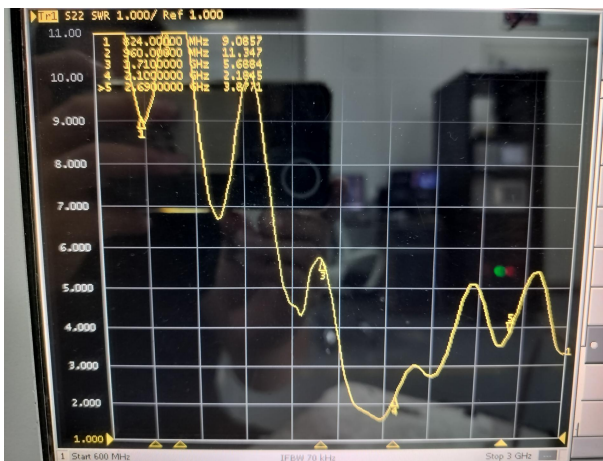
## 4. Electrical Specifications

4-1

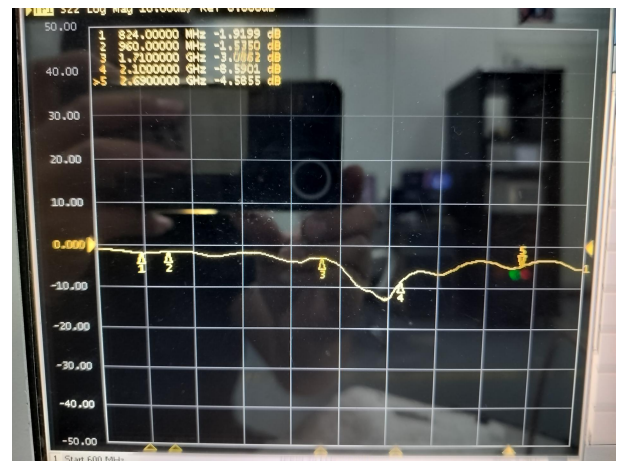
Characteristics	Specifications	Unit
Outline Dimensions	16.89x 8.95x 0.12	mm
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	5max	

4-2

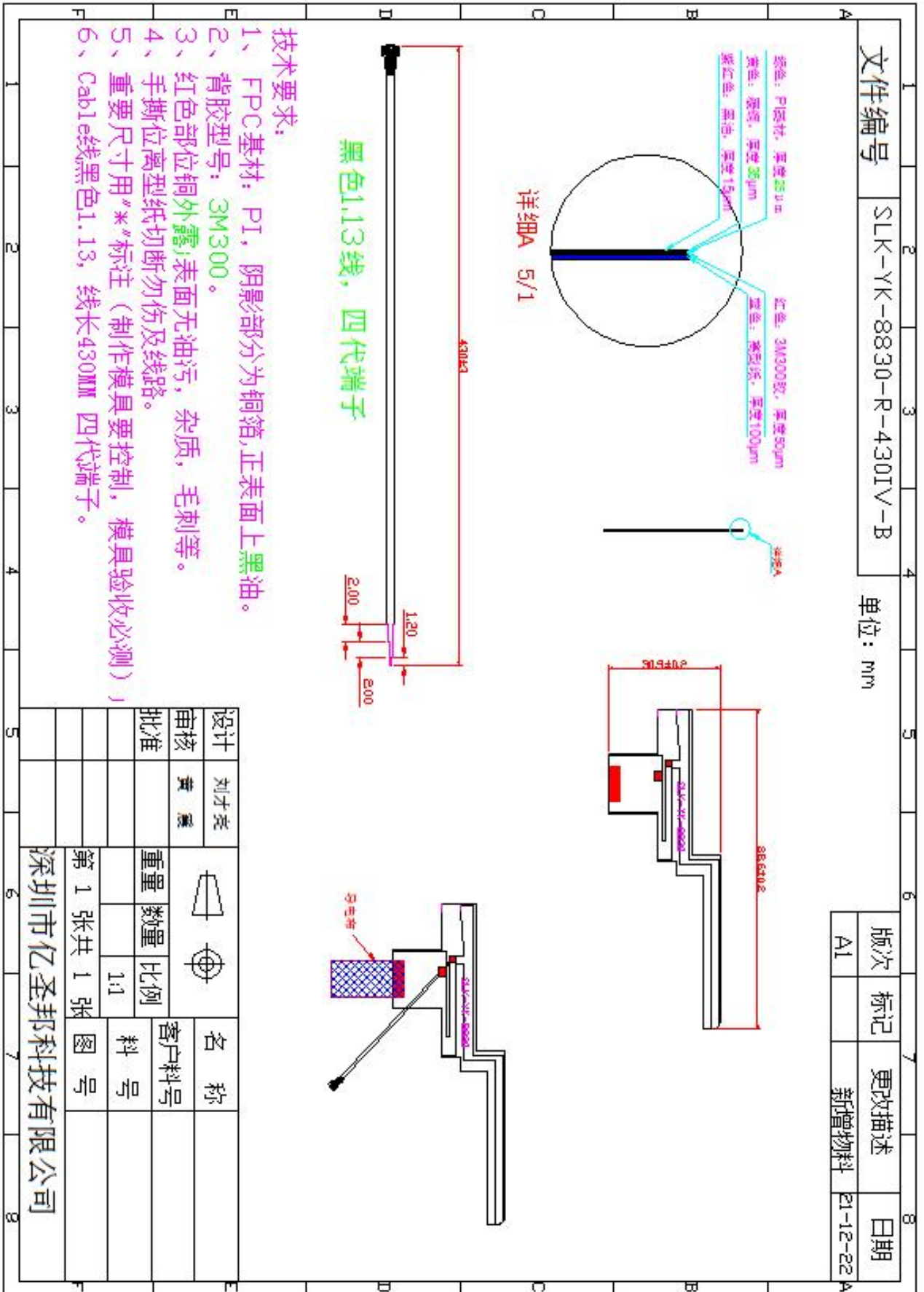
VSWR



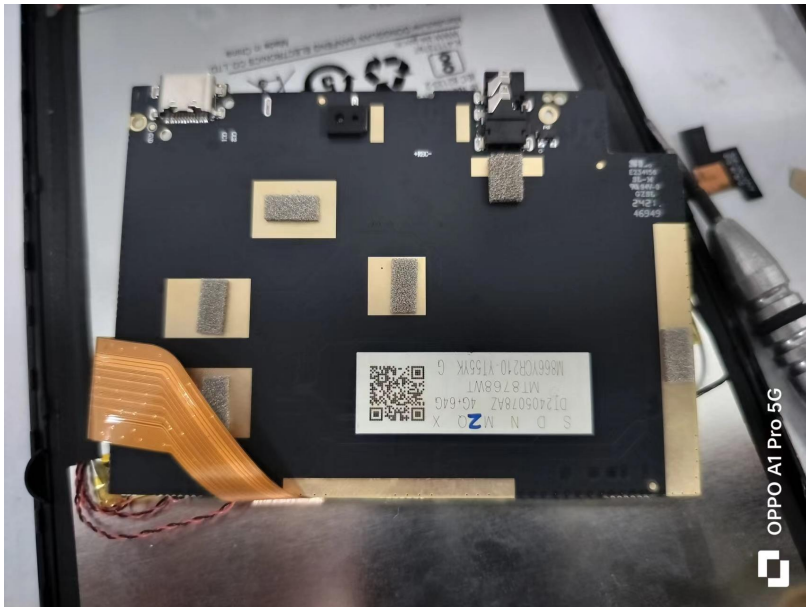
S11



## 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**