

Shenzhen Yishengbang Technology Co., LTD

Sample acceptance letter

SPECIFICATION FOR APPROVAL

he name of the company: Guangzhou Commercial Science Information Co., LTD

The material code: _____

specifications: P40HD (英卡主板)

Admitted to date: _____

The name of the supplier: Shenzhen Yishengbang Technology Co., LTD

Supplier standard type number: WIFI+GPS:SLK-PNE-3913B (W/B/G)

4G AUX:SLK-PNE-1614A-R-360111-B 4G MAIN:SLK-PNE-6512A

WIFI+GPS 小板:SLK-PNE-P40HD (GPS V1)-R-75111-G 4G 小板:SLK-PNE-P40HD (LTE V1)-R-155111-B

Admit signature

For acceptance by the contractor			Guangzhou Commercial Science Information Co., LTD		
Rf Engineer	audit	approval	Rf Engineer	audit	approval
Shi Lian <i>Shi Lian Chen</i>	Zhen Huang <i>Zhen Huang</i>	Mei Cai Lin <i>Mei Cai Lin</i>	Qiang Huang <i>Qiang Huang</i>	Zhi Guang Liu <i>Zhi Guang Liu</i>	Jia Yi Chen <i>Jia Yi Chen</i>
Signed and sealed		<i>Mei Cai Lin</i>	Signed and sealed		<i>Jia Yi Chen</i>
date		2023-5-16	date		2023-5-17
instructions: ☐ accept ☐ Conditional acceptance					
note:					

The name of the supplier: Shenzhen Yishengbang Technology Co., LTD

Supplier address: 101, Building C, Shenzhen Qianwan Hard Technology Industrial Park, Bao 'an District, Shenzhen

telephone: 18025305599

telephone: 18666299104

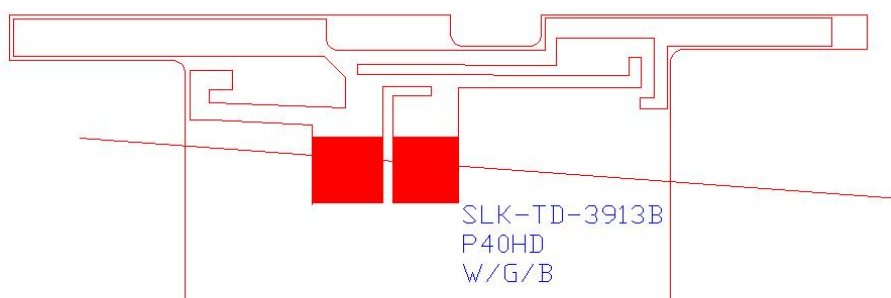
WIFI+GPS Antenna (3913B)

1. Explanation of Product number :

S L K - P N E - 3 9 1 3 B (W / B / G)

1

2



Product Code:

(1) Customer:

PNE:普耐尔

(2) Project:

3913B: SLK-PNE-3913B(W/B/G) (WIFI+GPS antenna)

备注： 配套SLK-PNE-P40HD(GPS V1)-R-75III-G小板

2. Features

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

3. Applications

- * IEEE752.11 (a/b/g/n/ac/ax)
- * Hand-held devices when WIFI (802.11a/b/g/n/ac/ax)GPS functions are needed

4. Description

Holy bond's FPC antenna series are specially designed for WIFI (802.11 a/b/g/n/ac/ax) 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.

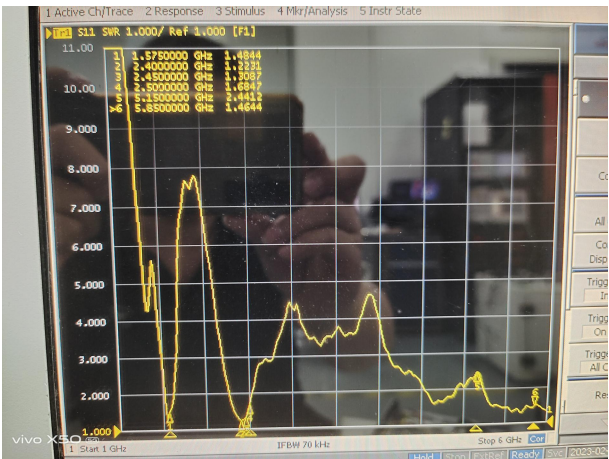
5. Electrical Specifications

5-1

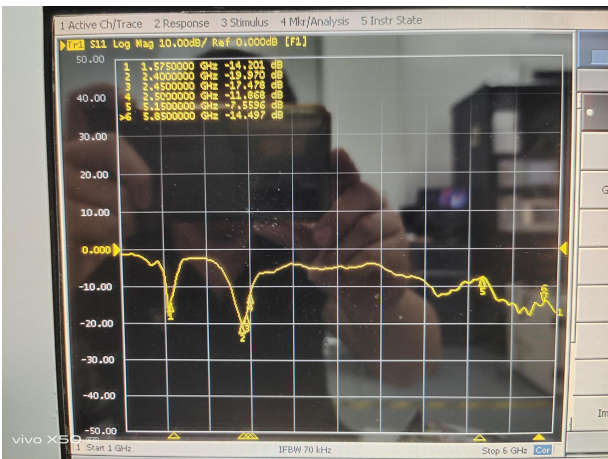
Characteristics	Specifications	Unit
Outline Dimensions	39.5x 13.25x 0.12	mm
Center Frequency	1.575+2.4-2.5+5.15-5.75	GHz
VSWR	3max	

5-2.

VSWR



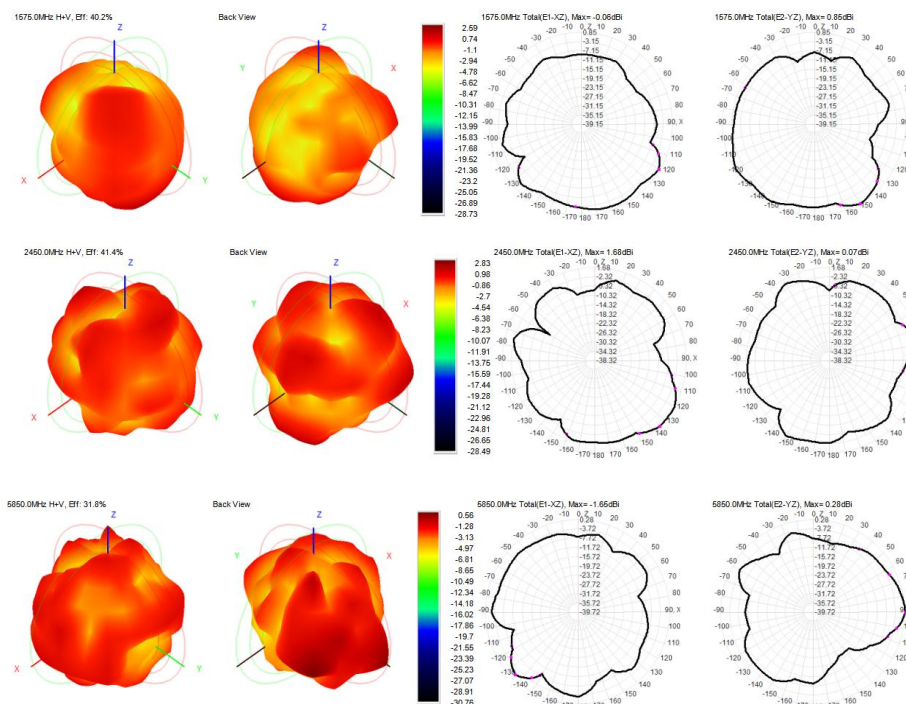
S11



5-3.WIFI +GPS Antenna Gain/Efficiency/Radiation Pattern of 3D

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
1570.0	-3.90	2.52	40.78
1575.0	-3.96	2.59	40.19
1580.0	-4.03	2.67	39.53
2400.0	-4.00	3.95	39.78
2410.0	-3.96	3.92	40.15
2420.0	-3.92	3.69	40.57
2430.0	-3.87	3.39	40.98
2440.0	-3.83	3.05	41.40
2450.0	-3.83	2.83	41.36
2460.0	-3.85	2.70	41.23
2470.0	-3.80	2.81	41.65
2480.0	-3.77	3.00	41.96
2490.0	-3.65	3.10	43.15
2500.0	-3.51	3.07	44.61
5150.0	-5.21	0.72	30.10
5250.0	-5.06	0.50	31.17
5350.0	-4.64	0.95	34.32
5550.0	-4.33	0.56	36.87
5750.0	-5.08	-0.30	31.04
5850.0	-4.98	0.56	31.79

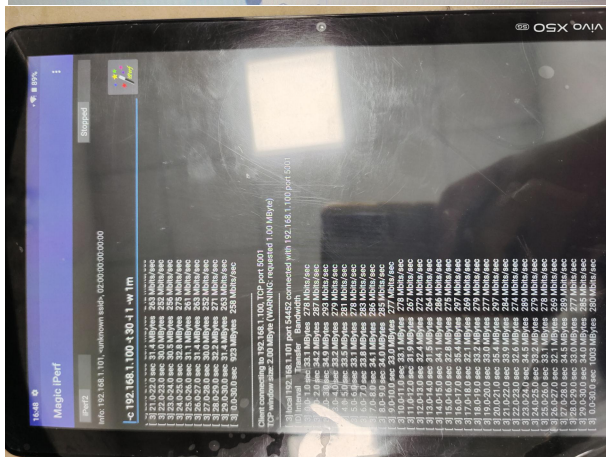
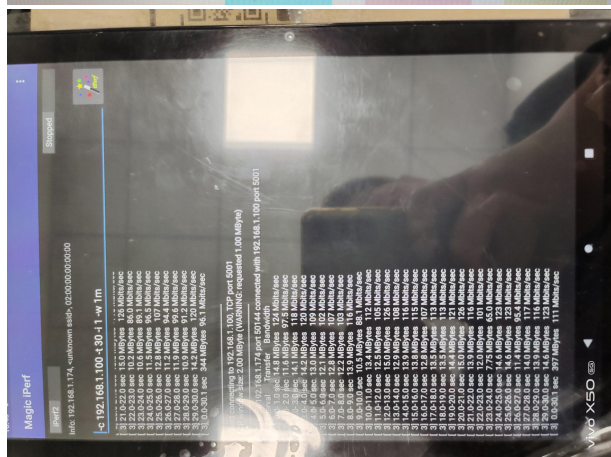
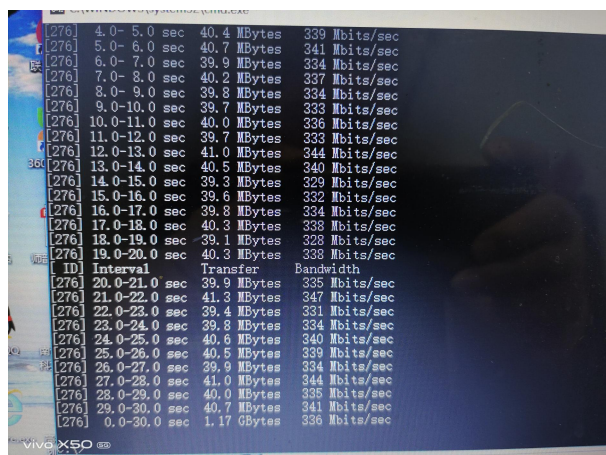
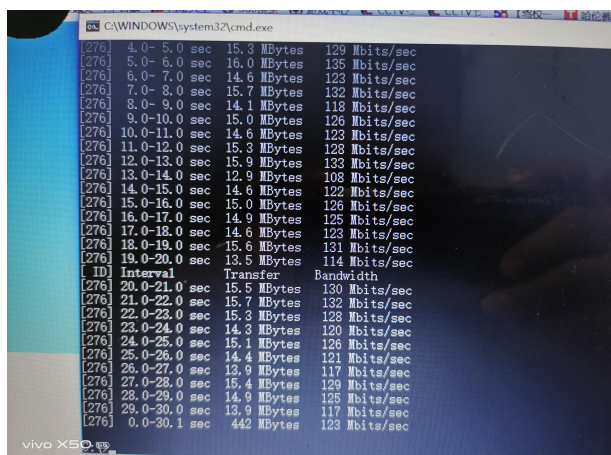
WIFI 有源测试			
频段	1	6	11
B-TRP-11MBps	12.57	13.12	12.79
B-TIS-11MBps	-80.43	-80.18	-79.84
G-TRP-54MBps	11.46	12.32	11.75
G-TIS-54MBps	-70.18	-70.48	-70.49
N-TRP-MCS7	11.59	12.37	11.82
N-TIS-MCS7	-64.84	-65.08	-64.55
频段	36	149	165
A-TRP-54MBps	9.29	10.29	10.11
A-TIS-54MBps	-70.12	-70.48	-70.64



5.4 WIFI Throughput Test

2.4G 十米下载

5G 十米下载



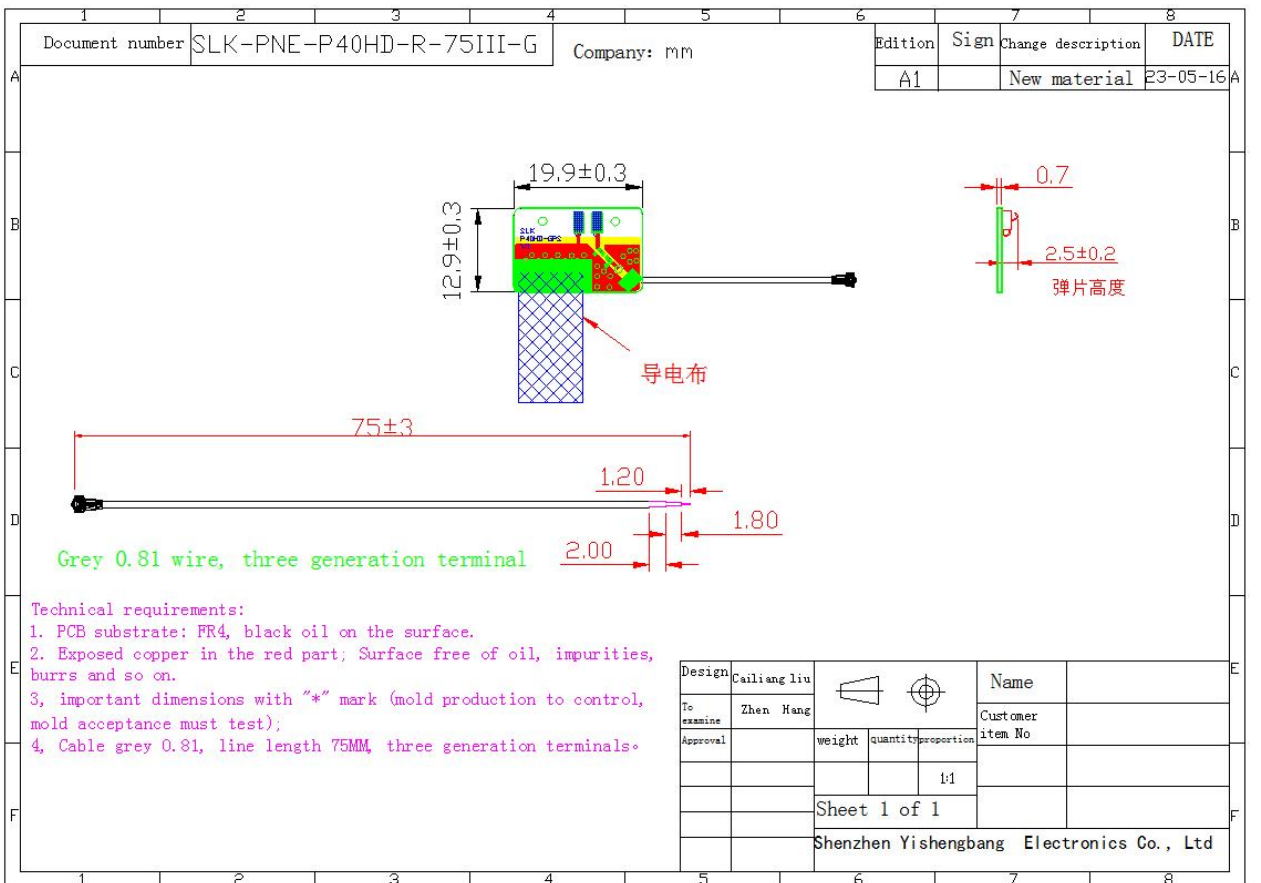
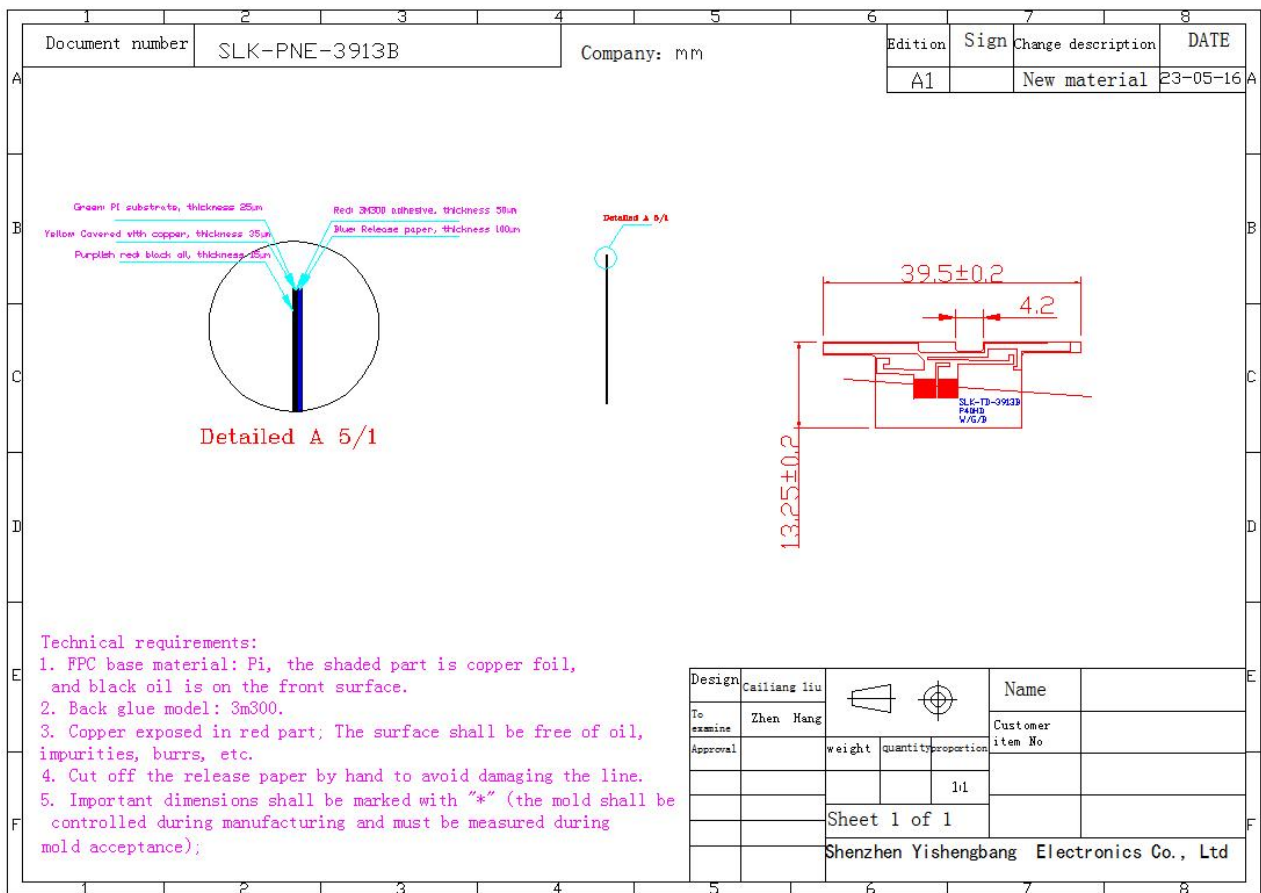
2.4G 十米上传

5G 十米上传

5.5 GPS Actual effec



6. Antenna Dimensions (unit: mm)

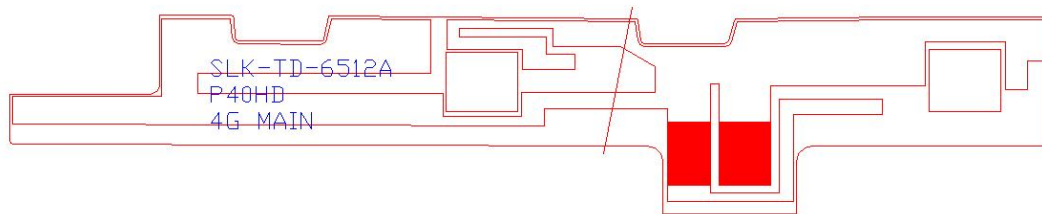


4G MAIN Antenna (6512A)

1. Explanation of Product number :

S L K - P N E - 6 5 1 2 A

1 2



Product Code:

(1) Customer:

PNE:普耐尔

(2) Project:

6512A: SLK-PNE-6512A (4G MAIN antenna)

备注：配套SLK-PNE-P40HD(LTE V1)-155III-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.

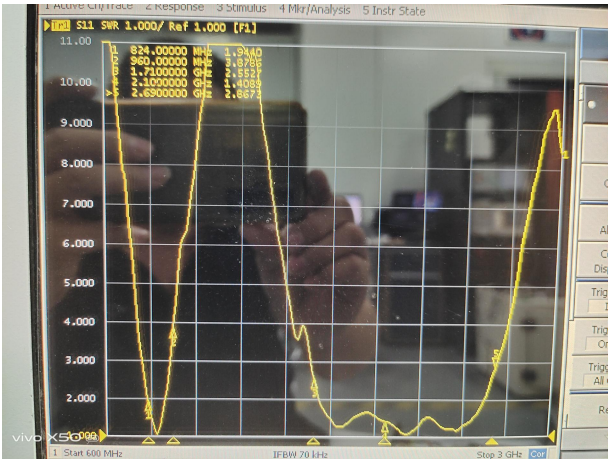
4. Electrical Specifications

4-1

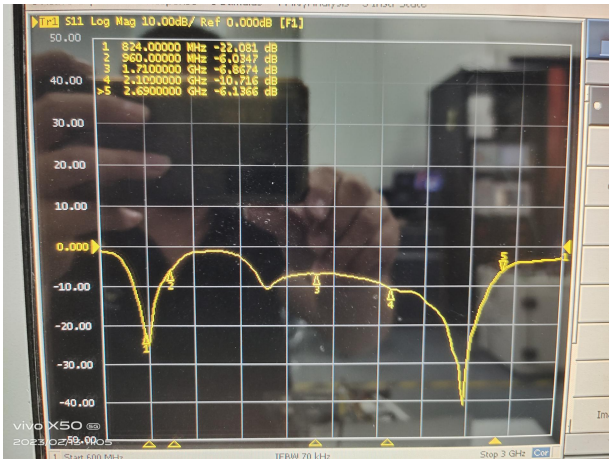
Characteristics	Specifications	Unit
Outline Dimensions	65.55x 12.41x 0.12	mm
VSWR	5max	
Impedance	50	Ω
Polarization	Linear Polarization	

4-2

VSWR



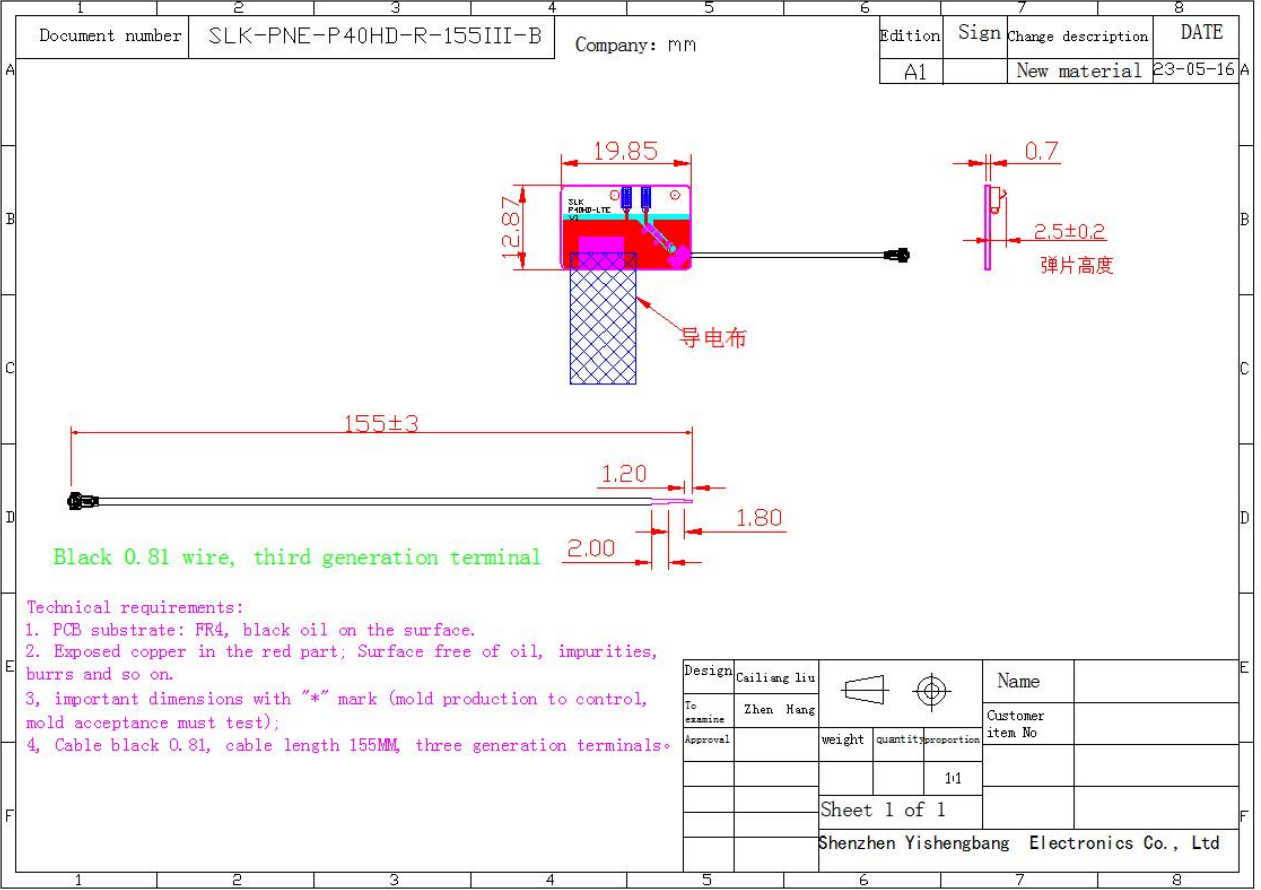
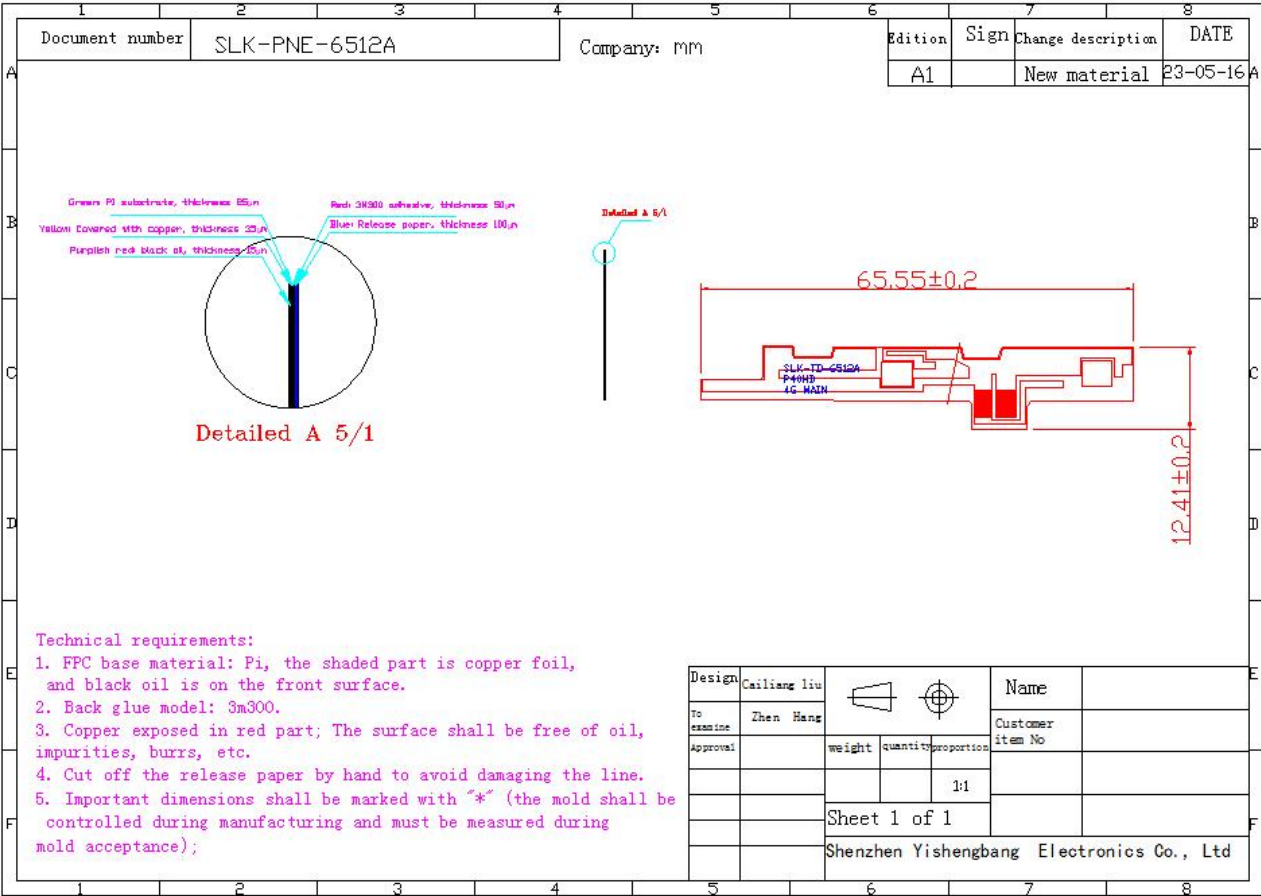
S11



4-3. 2G/3G/4G Antenna TRP/TIS

2G 频段	LTE-L	LTE-M	LTE-R	TIS	天线增益
GSM850	26.21	26.11	25.68	-102.08	0.8db
GSM900	26.74	26.32	26.04	-102.42	0.9db
GSM1800	24.07	24.15	24.37	-102.15	1db
GSM1900	24.23	24.47	24.15	-102.29	1.1db
3G 频段	LTE-L	LTE-M	LTE-R	TIS	天线增益
WCDMA-B1	17.79	17.61	18.05	-103.52	1.3db
WCDMA-B5	16.68	16.92	17.28	-102.61	0.8db
WCDMA-B8	16.84	17.12	17.07	-102.24	0.9db
4G 频段	LTE-L	LTE-M	LTE-R	TIS	天线增益
LTE-1	17.16	17.25	17.54	-90.48	1.1db
LTE-3	17.02	17.48	17.22	-91.32	1db
LTE-5	16.94	16.58	16.29	-89.64	0.8db
LTE-7	17.79	17.52	17.37	-89.51	1.5db
LTE-8	17.02	16.83	16.24	-89.45	0.9db
LTE-20	17.48	17.52	17.19	-89.74	0.8db
LTE-38	17.28	17.14	17.05	90.17	1.5db
LTE-39	17.08	17.28	17.17	-89.27	1.2db
LTE-40	18.17	18.35	18.49	-92.48	1.3db
LTE-41	17.11	17.43	17.58	-89.87	1.4db

5. Antenna Dimensions (unit: mm)



4G AUX Antenna (1614A)

1. Explanation of Product number:

S L K - P N E - 1 6 1 4 A - R - 3 6 0 I I I - B

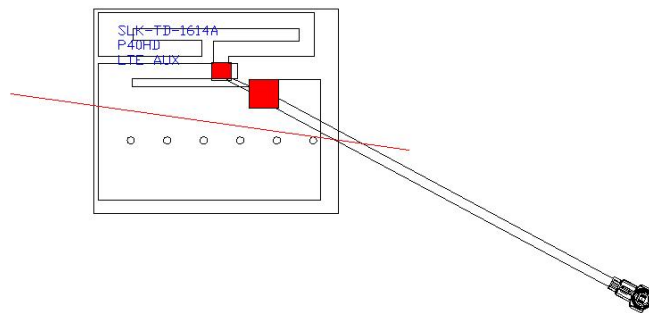
1

2

3

4

5



Product Code:

(1) Customer:

PNE:普耐尔

(2) Project:

1614A: SLK-1614A (4G AUX antenna)

(3) Welding Position

R: Right

(4) Cable Length:

360III: 360*0.81MM三代端子

(5) Cable Color

B: Black

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	16.71x 14.03x 0.12	mm
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	5max	

4-2

VSWR



S11

