

Shenzhen Yi Sheng Bang technology Co., LTD

Sample acceptance

SPECIFICATION FOR APPROVAL

Name of the company (Customer filling) : Shenzhen Nasda Industry Trade Co., Ltd

Material code (Customer filling) : _____

Grid type number (Customer filling) : NK10235

Acceptance date (Customer filling) : _____

For the name of the business (SLK field) : Shenzhen Yi Sheng Bang technology Co., LTD

Supplier gauge type number (SLK field) : WIFI:SLK-NSD-2313C-M-140IV-B

Acceptance stamp					
Acceptance by supplier (SLK field)			<u>Shenzhen Nasda Industry Trade Co., Ltd</u>		
engineer	check	approval	engineer	check	approval
Cheng	Huang	Lin			
shilian	zhen	meicai			
Seal and sign			Seal and sign		
Day period		2024-12-13	Day period		
Instructions: ☐ Accepted ☐ Accepted with conditions					
remark (Customer filling) :					

Supplier Name :Shenzhen Yi Sheng Bang technology Co., LTD

Supplier Address: 2nd Floor, No. 5, Yinyuan Street, Jiaoyitang,
Tangxia Town, Dongguan City

Tel: 0755-29475882 Transmission: 0755-29163512

WIFI Antenna (2313C)

1. Explanation of Product number :

S L K - N S D - 2 3 1 3 C - M - 1 4 0 I V - B

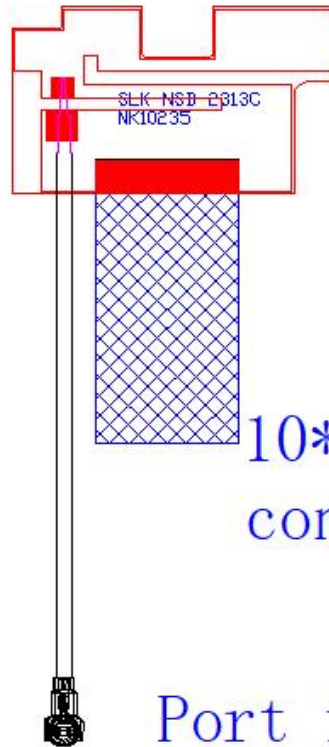
1

2

3

4

5



10*20MM

conductive fabric

Port facing
downwards

Product Code:

(1) Customer:

NSD:纳斯达

(2) Project:

2313C: SLK-2313C (WIFI MAIN antenna)

(3) Welding Position

M:Middle

(4) Cable Length:

140IV: 140*0.81MM四代端子

(5)Cable Color

B: Black

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

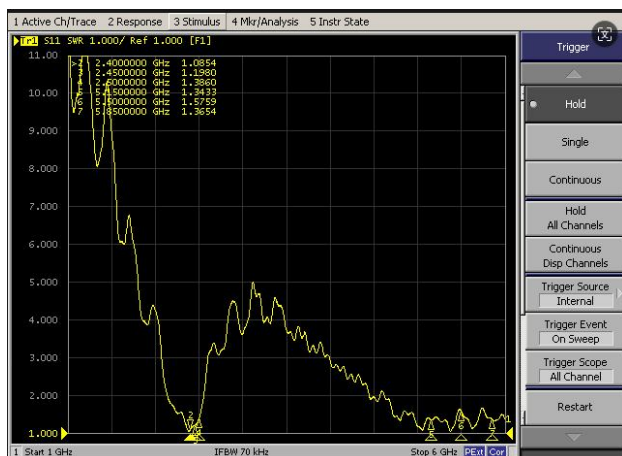
Holy bond's FPC antenna series are specially designed for WIFI (802.11a/b/g/n) applications. Based on Holy bond's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Electrical Specifications

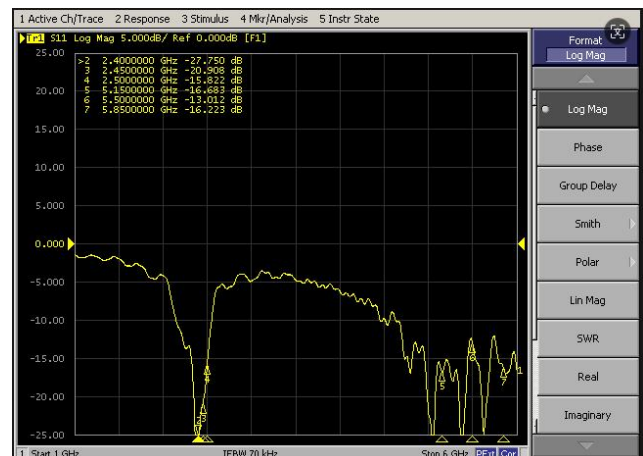
5-1

Characteristics	Specifications	Unit
Outline Dimensions	22.7x13.1x 0.12	mm
Center Frequency	2.4-2.5/5.1-5.8	GHz
Bandwidth(under-10dB return loss)	130min	MHz
VSWR	3max	

5-2. WIFI MAIN Antenna VSWR/S11



VSWR

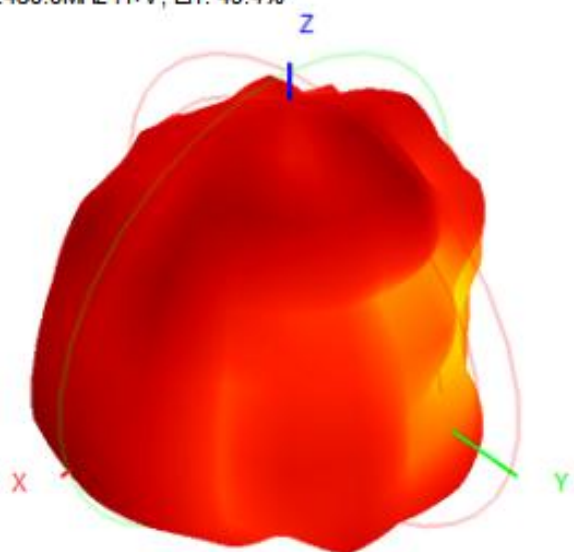


S11

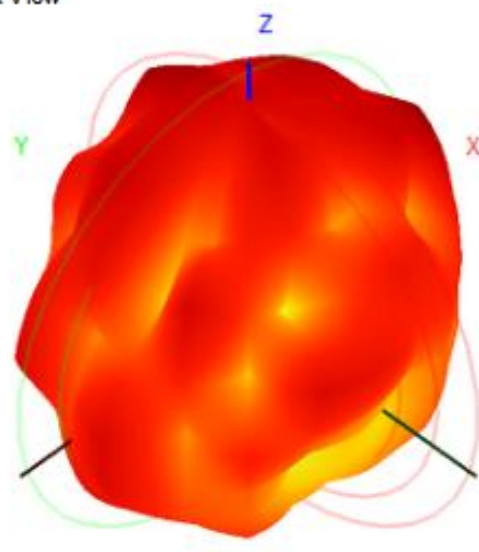
5-3. WIFI Antenna Gain/Efficiency/Radiation Pattern of 3D

Frequency (MHz)	Efficiency (dBi)	Gain (dBi)	Efficiency (%)
2400	-3.06	1.65	49.41
2410	-2.98	1.32	50.31
2420	-2.68	1.08	53.99
2430	-2.81	0.91	52.42
2440	-2.90	0.77	51.34
2450	-3.07	1.04	49.37
2460	-2.96	1.21	50.56
2470	-3.27	1.09	47.07
2480	-3.23	1.24	47.54
2490	-3.24	1.36	47.41
2500	-3.31	1.50	46.69
5150	-4.23	1.31	37.72
5250	-3.96	1.82	40.20
5350	-3.57	2.52	43.91
5450	-3.64	2.57	43.27
5550	-3.91	2.25	40.67
5650	-3.79	2.21	41.78
5750	-3.91	2.27	40.69
5850	-3.34	2.33	46.36

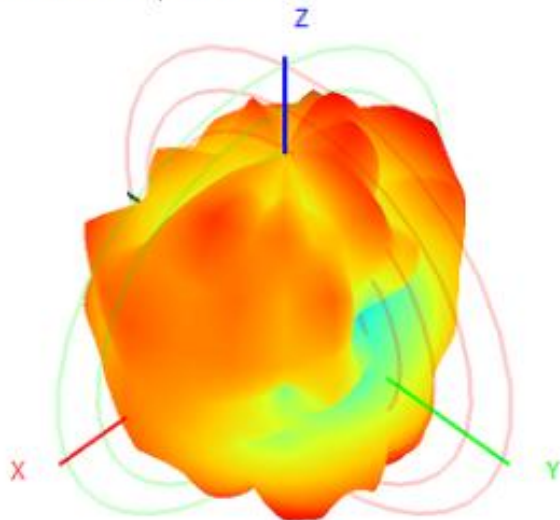
2450.0MHz H+V, Eff: 49.4%



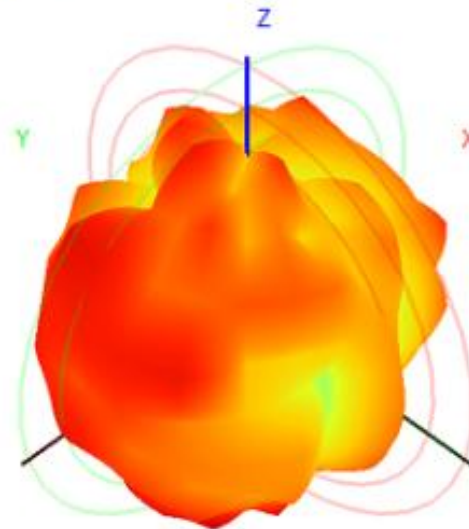
Back View



5850.0MHz H+V, Eff: 46.4%



Back View



5-4. WIFI active test

WIFI active testing			
Frequency band	1	6	11
B-TRP-11MBps	13.34	13.12	13.87
B-TIS-11MBps	-82.10	-82.42	-82.47
G-TRP-54MBps	12.63	12.22	12.20
G-TIS-54MBps	-71.06	-71.32	-71.09
N-TRP-MCS7	12.58	12.20	12.18
N-TIS-MCS7	-67.11	-67.42	-67.12
Frequency band	36	149	165
A-TRP-54MBps	12.97	12.88	12.71
A-TIS-54MBps	-71.28	-71.34	-71.22

C:\Windows\System32\cmd.exe				
[4]	8.00-9.00	sec	18.6 MBytes	156 Mbits/sec
[4]	9.00-10.00	sec	19.2 MBytes	161 Mbits/sec
[4]	10.00-11.00	sec	18.9 MBytes	159 Mbits/sec
[4]	11.00-12.00	sec	18.5 MBytes	155 Mbits/sec
[4]	12.00-13.00	sec	17.2 MBytes	144 Mbits/sec
[4]	13.00-14.00	sec	17.9 MBytes	150 Mbits/sec
[4]	14.00-15.00	sec	18.8 MBytes	158 Mbits/sec
[4]	15.00-16.00	sec	18.1 MBytes	151 Mbits/sec
[4]	16.00-17.00	sec	12.1 MBytes	102 Mbits/sec
[4]	17.00-18.00	sec	18.2 MBytes	152 Mbits/sec
[4]	18.00-19.00	sec	18.8 MBytes	157 Mbits/sec
[4]	19.00-20.01	sec	18.8 MBytes	157 Mbits/sec
[4]	20.01-21.00	sec	19.1 MBytes	161 Mbits/sec
[4]	21.00-22.00	sec	19.0 MBytes	160 Mbits/sec
[4]	22.00-23.01	sec	16.8 MBytes	140 Mbits/sec
[4]	23.01-24.00	sec	18.2 MBytes	154 Mbits/sec
[4]	24.00-25.01	sec	18.4 MBytes	154 Mbits/sec
[4]	25.01-26.01	sec	17.8 MBytes	149 Mbits/sec
[4]	26.01-27.01	sec	19.0 MBytes	159 Mbits/sec
[4]	27.01-28.01	sec	18.5 MBytes	155 Mbits/sec
[4]	28.01-29.01	sec	18.8 MBytes	157 Mbits/sec
[4]	29.01-30.01	sec	18.9 MBytes	158 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[4]	0.00-30.01	sec	536 MBytes	150 Mbits/sec
[4]	0.00-30.01	sec	536 MBytes	150 Mbits/sec
iperf Done.				

2.4G-RX-10m

C:\Windows\System32\cmd.exe				
[4]	8.00-9.00	sec	18.5 MBytes	156 Mbits/sec
[4]	9.00-10.00	sec	17.6 MBytes	147 Mbits/sec
[4]	10.00-11.00	sec	16.7 MBytes	140 Mbits/sec
[4]	11.00-12.00	sec	18.0 MBytes	151 Mbits/sec
[4]	12.00-13.00	sec	17.6 MBytes	148 Mbits/sec
[4]	13.00-14.00	sec	18.2 MBytes	153 Mbits/sec
[4]	14.00-15.01	sec	17.3 MBytes	144 Mbits/sec
[4]	15.01-16.01	sec	17.8 MBytes	149 Mbits/sec
[4]	16.01-17.00	sec	18.1 MBytes	153 Mbits/sec
[4]	17.00-18.00	sec	18.0 MBytes	151 Mbits/sec
[4]	18.00-19.00	sec	12.9 MBytes	108 Mbits/sec
[4]	19.00-20.00	sec	19.0 MBytes	159 Mbits/sec
[4]	20.00-21.00	sec	19.2 MBytes	161 Mbits/sec
[4]	21.00-22.00	sec	19.6 MBytes	164 Mbits/sec
[4]	22.00-23.00	sec	19.6 MBytes	164 Mbits/sec
[4]	23.00-24.00	sec	18.7 MBytes	157 Mbits/sec
[4]	24.00-25.00	sec	19.4 MBytes	163 Mbits/sec
[4]	25.00-26.00	sec	19.1 MBytes	160 Mbits/sec
[4]	26.00-27.00	sec	18.2 MBytes	152 Mbits/sec
[4]	27.00-28.00	sec	19.5 MBytes	164 Mbits/sec
[4]	28.00-29.00	sec	19.2 MBytes	161 Mbits/sec
[4]	29.00-30.00	sec	19.2 MBytes	161 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[4]	0.00-30.00	sec	539 MBytes	151 Mbits/sec
[4]	0.00-30.00	sec	539 MBytes	151 Mbits/sec
iperf Done.				

2.4G-TX-10m

C:\Windows\System32\cmd.exe				
[4]	8.00-9.01	sec	29.9 MBytes	250 Mbits/sec
[4]	9.01-10.00	sec	29.2 MBytes	247 Mbits/sec
[4]	10.00-11.01	sec	29.9 MBytes	250 Mbits/sec
[4]	11.01-12.00	sec	28.8 MBytes	242 Mbits/sec
[4]	12.00-13.00	sec	29.1 MBytes	245 Mbits/sec
[4]	13.00-14.00	sec	29.2 MBytes	245 Mbits/sec
[4]	14.00-15.01	sec	29.5 MBytes	246 Mbits/sec
[4]	15.01-16.01	sec	29.1 MBytes	245 Mbits/sec
[4]	16.01-17.00	sec	29.0 MBytes	244 Mbits/sec
[4]	17.00-18.01	sec	29.1 MBytes	243 Mbits/sec
[4]	18.01-19.01	sec	29.8 MBytes	250 Mbits/sec
[4]	19.01-20.00	sec	29.9 MBytes	252 Mbits/sec
[4]	20.00-21.00	sec	30.5 MBytes	256 Mbits/sec
[4]	21.00-22.00	sec	29.0 MBytes	244 Mbits/sec
[4]	22.00-23.00	sec	29.4 MBytes	247 Mbits/sec
[4]	23.00-24.01	sec	29.9 MBytes	249 Mbits/sec
[4]	24.01-25.01	sec	29.1 MBytes	244 Mbits/sec
[4]	25.01-26.01	sec	28.1 MBytes	236 Mbits/sec
[4]	26.01-27.00	sec	29.4 MBytes	248 Mbits/sec
[4]	27.00-28.00	sec	29.6 MBytes	248 Mbits/sec
[4]	28.00-29.01	sec	29.5 MBytes	247 Mbits/sec
[4]	29.01-30.00	sec	28.9 MBytes	244 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[4]	0.00-30.00	sec	884 MBytes	247 Mbits/sec
[4]	0.00-30.00	sec	884 MBytes	247 Mbits/sec
iperf Done.				

5G-RX-10m

C:\Windows\System32\cmd.exe				
[4]	8.00-9.00	sec	25.7 MBytes	215 Mbits/sec
[4]	9.00-10.00	sec	25.5 MBytes	213 Mbits/sec
[4]	10.00-11.00	sec	25.9 MBytes	218 Mbits/sec
[4]	11.00-12.00	sec	25.7 MBytes	215 Mbits/sec
[4]	12.00-13.00	sec	25.6 MBytes	215 Mbits/sec
[4]	13.00-14.00	sec	25.9 MBytes	217 Mbits/sec
[4]	14.00-15.00	sec	25.6 MBytes	215 Mbits/sec
[4]	15.00-16.00	sec	25.4 MBytes	213 Mbits/sec
[4]	16.00-17.00	sec	25.3 MBytes	212 Mbits/sec
[4]	17.00-18.00	sec	25.8 MBytes	216 Mbits/sec
[4]	18.00-19.00	sec	25.7 MBytes	215 Mbits/sec
[4]	19.00-20.00	sec	25.6 MBytes	215 Mbits/sec
[4]	20.00-21.00	sec	25.7 MBytes	216 Mbits/sec
[4]	21.00-22.00	sec	25.7 MBytes	215 Mbits/sec
[4]	22.00-23.00	sec	25.6 MBytes	215 Mbits/sec
[4]	23.00-24.00	sec	25.7 MBytes	216 Mbits/sec
[4]	24.00-25.00	sec	25.7 MBytes	216 Mbits/sec
[4]	25.00-26.00	sec	25.6 MBytes	214 Mbits/sec
[4]	26.00-27.00	sec	25.7 MBytes	216 Mbits/sec
[4]	27.00-28.00	sec	25.9 MBytes	218 Mbits/sec
[4]	28.00-29.00	sec	25.6 MBytes	215 Mbits/sec
[4]	29.00-30.00	sec	25.5 MBytes	214 Mbits/sec

[ID]	Interval		Transfer	Bandwidth
[4]	0.00-30.00	sec	769 MBytes	215 Mbits/sec
[4]	0.00-30.00	sec	769 MBytes	215 Mbits/sec
iperf Done.				

5G-TX-10m

6. Antenna Dimensions (unit: mm)

Document Number	SLK-NSD-2313C-M-1401V-B	Unit: mm	version	mark	details	date
			A1		new materials	24-12-13

22.7±0.2
13.1±0.2
140±3
1.20
2.00
1.80

2313C M-1401V-B
PORTING SPACE
PORTING TERMINALS

10*20MM
1.80

2313C M-1401V-B
PORTING TERMINALS

black 0.81, wire ,
fourth generation terminal.

Port facing
downwards

conductive fabric

Technical requirements:

- 1 FPC substrate: PI, The shaded area is copper foil, with black oil on the front surface.
2. The thickness of the board is 1/2, and the backing adhesive model is 3M300.
3. Copper is exposed in the red area. The surface is free of oil stains, impurities, burrs, etc.
4. Cut the release paper by hand without damaging the circuit.
5. Important dimensions are marked with "*" (mold production must be controlled, mold acceptance must be measured);
6. Cable wire black 0.81, wire length 140MM fourth generation terminal.

design process	Inu cailiang muang zhen				
approve		weight number	1:1	number	
				part number	
				number	
				Drawing	
				No	

page: 1/1
Shenzhen Yi Sheng Bang technology Co., LTD

Product verview

