

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

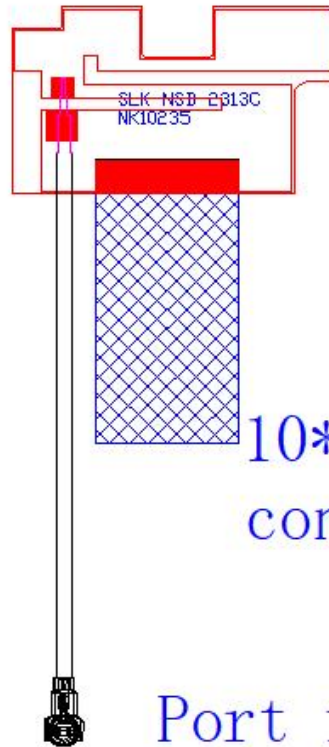
1

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

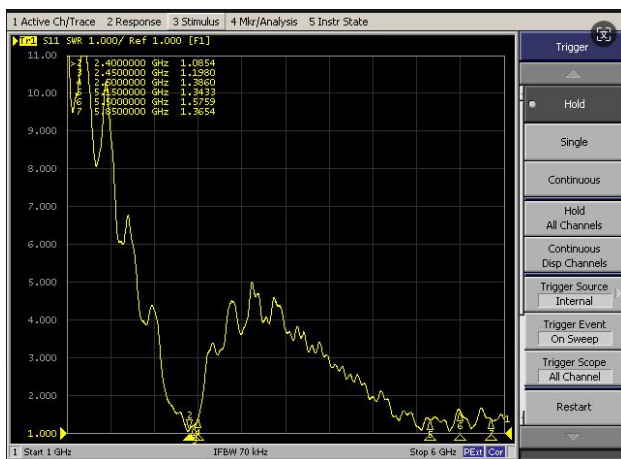
Holy bond's FPC antenna series are specially designed for WIFI (802.11a/b/g/n) applications. Based on Holy bond's proprietary design and processes, this FPC antenna has excellent stability and sensitivity to consistently provide high signal reception efficiency.

5. Electrical Specifications

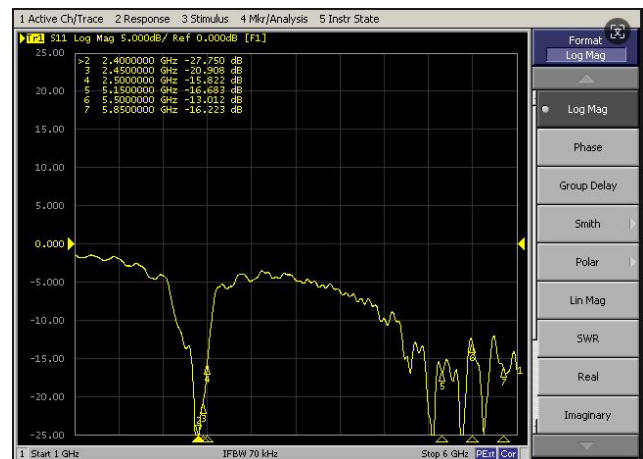
5-1

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

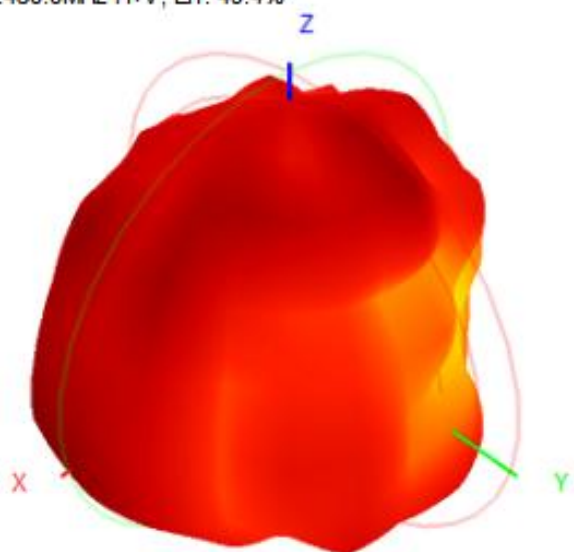


S11

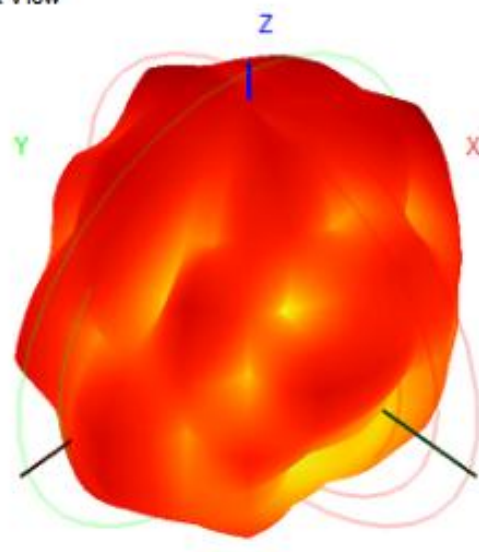
5-3. WIFI Antenna Gain/Efficiency/Radiation Pattern of 3D

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

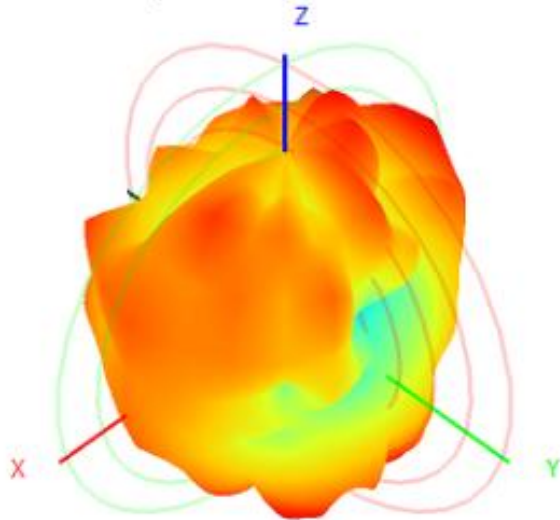
2450.0MHz H+V, Eff: 49.4%



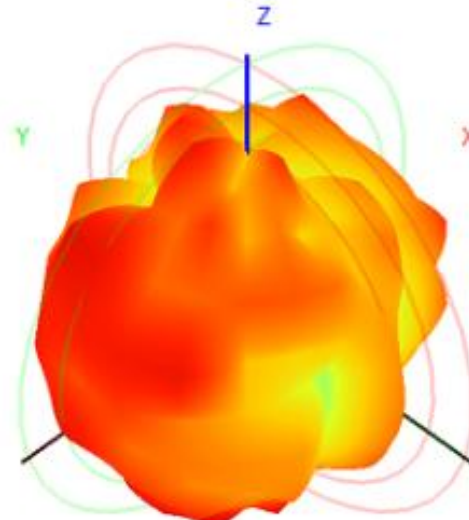
Back View



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

black 0.81, wire,
fourth generation terminal.

Port facing
downwards

conductive fabric

black 0.81, wire,
fourth generation terminal.

Port facing
downwards

conductive fabric

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fourth generation terminal.

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