



Dongguan Hengxin Electronic Technology Co., Ltd.

acknowledgment

client

Name

External Antenna

P/N(Part Number)

HX-T03-FAKRA1500

Customer Material Number:

date landed:

2020.02.13

customer confirmation			supplier	
engineering department	quality reliability assurance	purchasing department	Check	Sample sender
			Zhao 2020.02.13 shougang	Gao jing

Address: No. 75, Yanghe Road, Yanggongzhuo, Shatian Town, Dongguan City

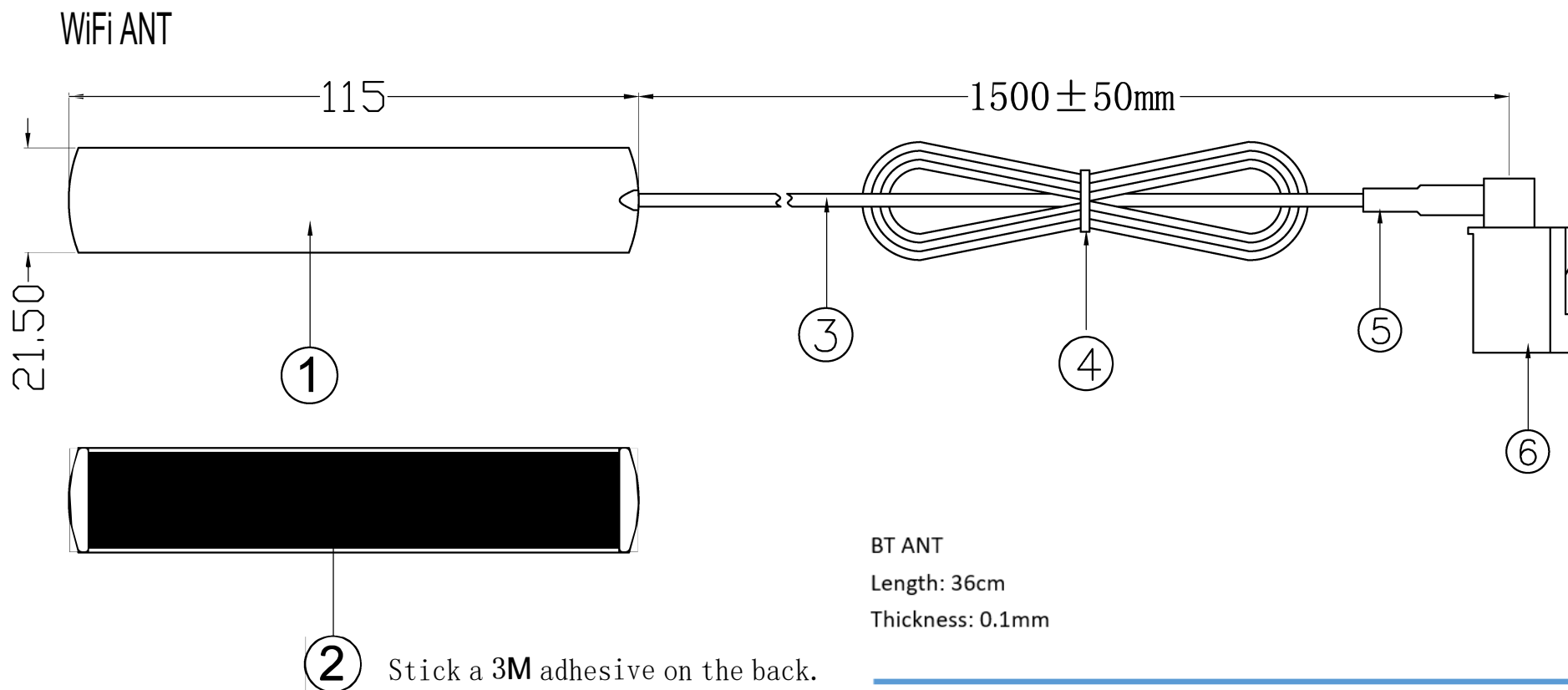
TEL : 0769-81663533 FAX: 0769-89361945

E-mail:nogps@nogps.com

Http://www.nogps.com

RoHS
Compatible

序号	日期	原因	确认人
B			
C			
D			



2 Stick a 3M adhesive on the back.

BT ANT
Length: 36cm
Thickness: 0.1mm

6	HX-FAKRA-09	FAKRA Male M	Brass	90°Right Angle	1
5	HX-RSTG-01	Heat Shrink Tube	PVC	ø8*20.0mm	1
4	HX-Bundle-01	Bundle	PET	L=100mm	1
3	HX-RG-174	Coaxial Cable	RG174	L=1500mm	1
2	HX-3M-01	Tape	3M	RED L115*W21.5*1.0T	1
1	HX-SJ11521-01	Plastic Body	ABS	Black	1
No.	Part Number	Name	Material	Finished	Q'ty

Dongguan Hengxin Electronic Technology Co., Ltd.

PART NAME: Antenna

PART NO.: HX-T03-FAKRA1500 .W01 DATE: 2017-06-17

APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
		Zhang ya jun	UNITS: mm	X.X ±0.50
			SCALE: 1/1	X.XX±0.15
			REVISION:A	X° ±3°

Index:

- 1. Reliability Testing**
- 2. Specification**
- 3. SParameter Test Data**
- 4. Antenna Radiation Pattern**

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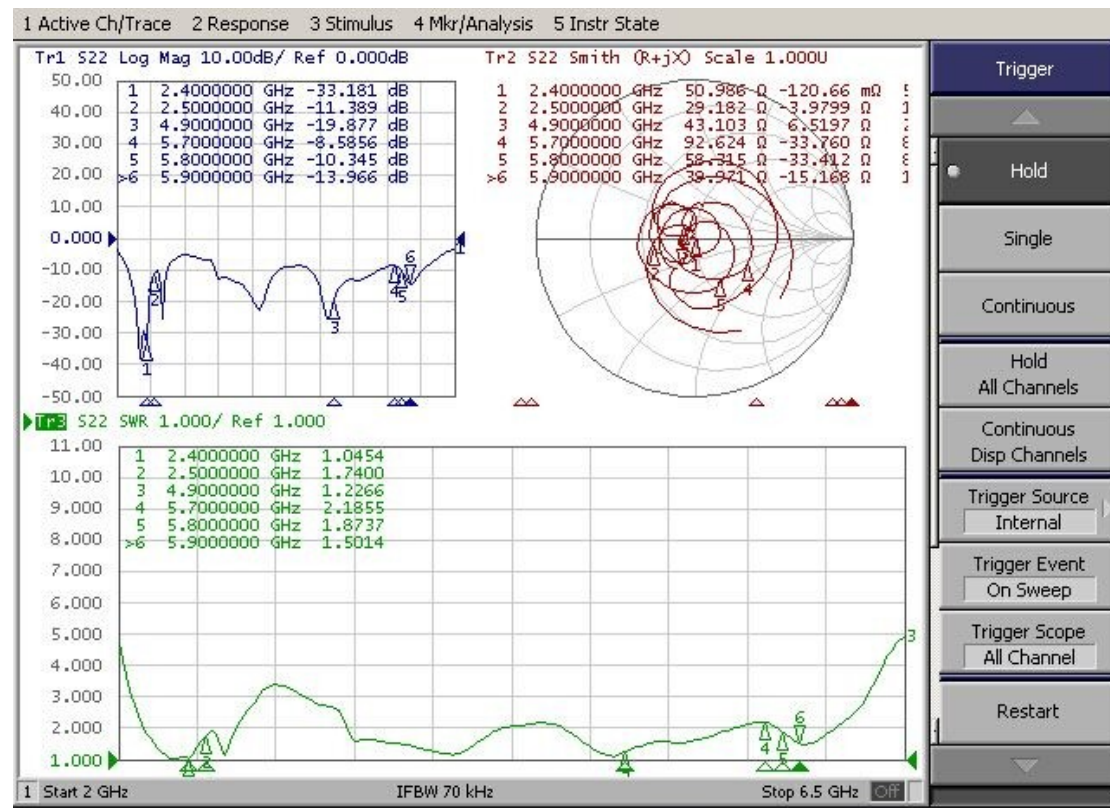
1. Reliability Testing

Test Item	Procedure	Requirement
1. Visual inspection and Dimension Check	Applicable methods using x5 magnification	follow specification
2. Rapid Changing of Temperature	-40°C (30minutes) to 90°C (30minutes); 24 cycles	After 2 hours recovery: 1. no visible damage 2. Freq. Tol.: < $\pm 5\%$
3. Damp Heat	24 hours at 60°C; 90 ~ 95% RH	After 2 hours recovery: 1. no visible damage 2. Freq. Tol. : < $\pm 5\%$
4. Endurance	24 hours at 90°C	After 2 hours recovery: 1. no visible damage 2. Freq Tol.: < $\pm 5\%$

2. Specification

A. Electrical Characteristics	
S.W.R.	2400-2500/5000-5865 MHz: ≤ 2.0
Impedance	50 Ohm
B. Material	
Material of Radiator	Cu (Plated)
Connector Type	SMA Male Reverse
C. Environmental	
Operation Temperature	- 30 °C ~ + 85 °C
Storage Temperature	- 30 °C ~ + 85 °C

3. S Parameter Test data



4. Antenna Radiation Pattern

Testing Equipment Specification:

Antenna Anechoic Chamber Dimension: 8 x 4 x 4 m

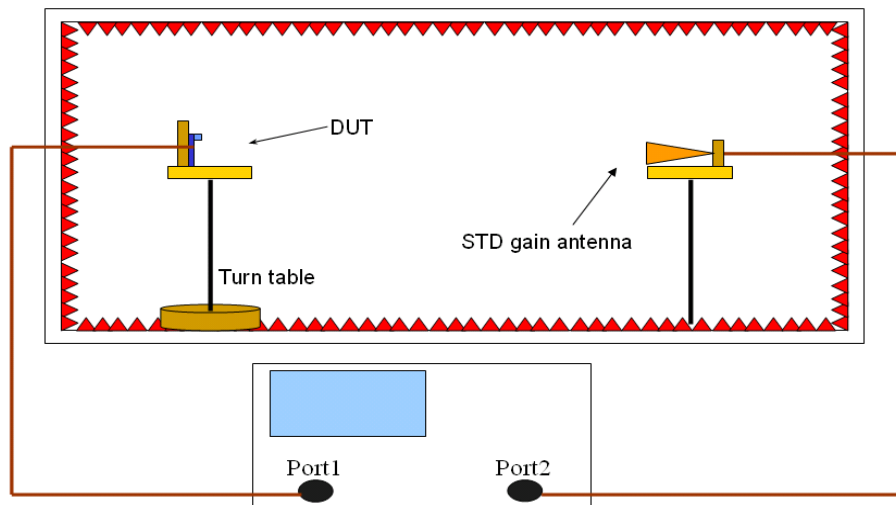
Quiet Zone: 600mm @1 GHz

Isolation: >100dB @ 1 MHz ~ 10 GHz

Testing Equipment: Agilent 5071B

Received Antenna: 0.7 ~ 6.0 GHz for Gain Calibration

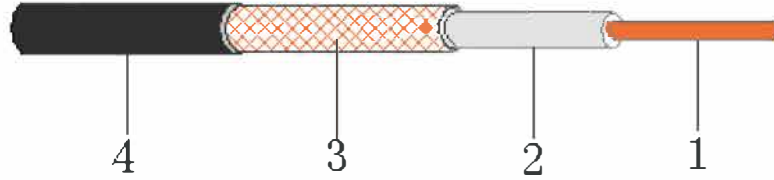
Double Ridged Horn Antenna



Technical data of product

Name of cable	Solid polyethylene insulated coaxial cables		
Type of cable	RG174	Standard	MIL-C-17

一、Structure diagram of product



二、Size of product

No.	Item	Structure	Material	Color
1	Inner conductor	7/0.16 mm	Bare copper	Yellow
2	Insulation	1.52mm	PE	White
3	Wire braid	80*0.12mm	CCA	Yellow
4	Jacket	2.80 mm	PVC	Black
5	Making	RG 174 ROHS		

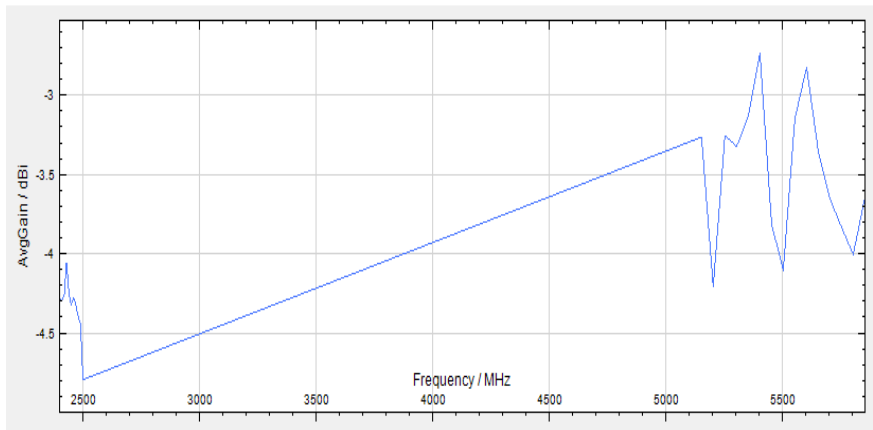
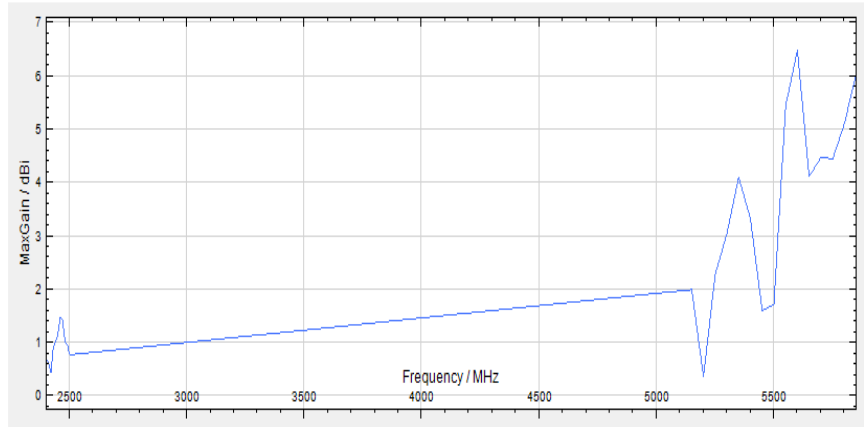
三、Electrical physical and properties of product

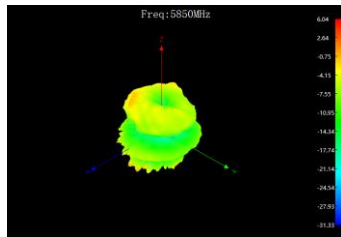
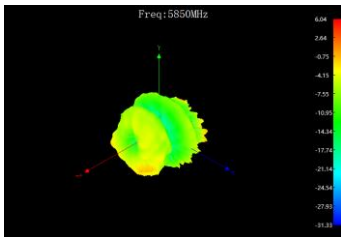
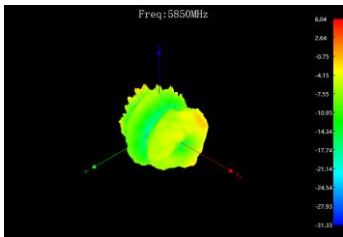
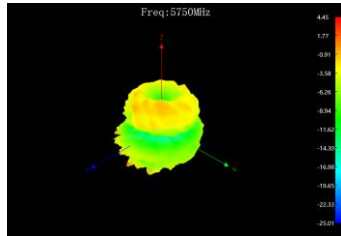
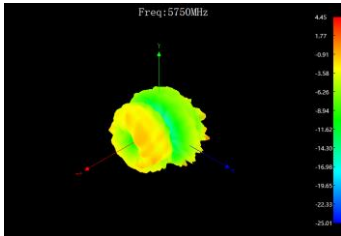
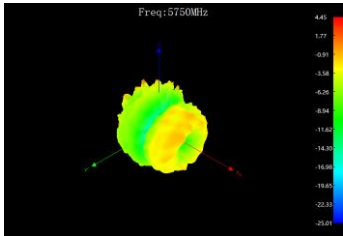
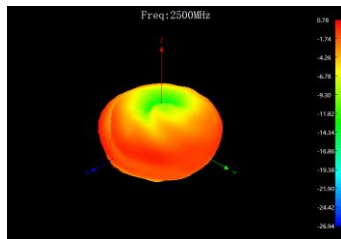
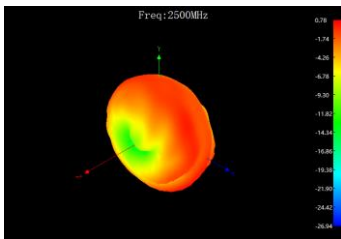
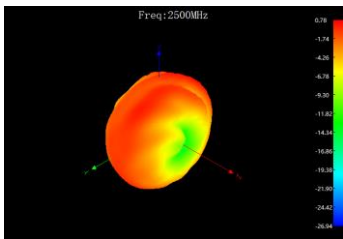
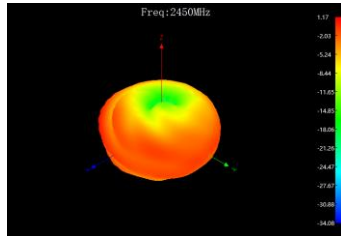
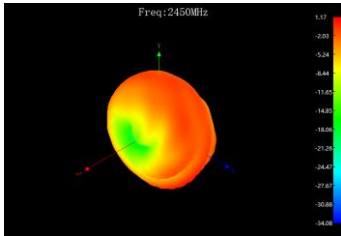
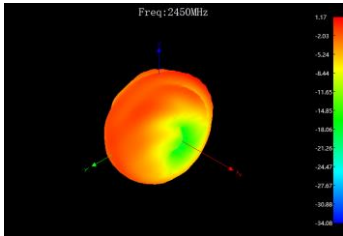
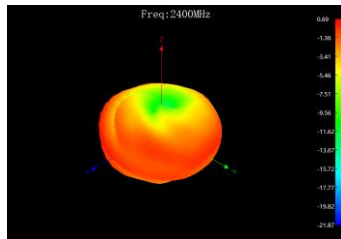
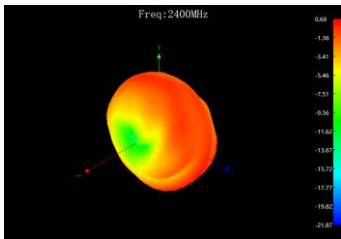
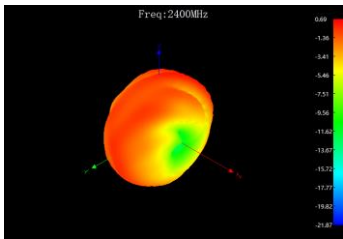
Item		Unit	Value
Capacitance		pF/m	100 ± 5
Impedance		Ω	50 ± 2
Velocity ratio		%	66
Bent radius		mm	14
Max voltage		VMS	1500
Max Frequency		MHz	3000
Temperature scope		℃	-20 ~ +80
Attenuation constant at 20℃ (Max.)	200MHz	dB/100m	45
	400MHz	dB/100m	64
	900MHz	dB/100m	96
	1800MHz	dB/100m	147
	2000MHz	dB/100m	168
	2500MHz	dB/100m	198
	3000MHz	dB/100m	332

2.4GHz/5GHz

Frequency/M MaxGain/dB AvgGain/dBi

2400	0.69	-4.28
2410	0.63	-4.29
2420	0.43	-4.26
2430	0.91	-4.05
2440	1.02	-4.24
2450	1.17	-4.32
2460	1.48	-4.27
2470	1.42	-4.32
2480	1.01	-4.39
2490	0.97	-4.44
2500	0.78	-4.79
5150	2	-3.26
5200	0.37	-4.2
5250	2.29	-3.25
5300	3.05	-3.32
5350	4.11	-3.13
5400	3.33	-2.73
5450	1.61	-3.81
5500	1.72	-4.1
5550	5.45	-3.14
5600	6.49	-2.82
5650	4.12	-3.35
5700	4.48	-3.65
5750	4.45	-3.83
5800	5.11	-4
5850	6.04	-3.64





BT

Frequency	Gain/ dB
2400	2.91
2410	3.09
2420	2.97
2430	3.04
2440	2.97
2450	3.21
2460	3.05
2470	3.46
2480	3.41
2490	3.55
2500	3.06

