



Tengxiang Technology.Inc

Product Number: AN2450-SNA250910-BZ

Product Name: Antenna

Specification For Approval

Customer: _____

Customer P/N: _____

Tengxiang P/N: AN2450-SNA250910-BZ

Description : ANTENNA

Tengxiang Checked By:	Customer Approved By:
工程: 邓文兵 射频: 韦佳 	



腾祥电子
TENGXIANG ELECTRONIC

Tengxiang Technology.Inc

SHA QU NO. 35 Industrial Sha-Tou Administration Zone, Chang-An Town, Dong-Guan City, Guangdong Province, China

TEL:86-769-81873082 FAX:86-769-82663788

<http://www.tengxiang.cn>

Product Number: AN2450-SNA250910-BZ

Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500MHz
S.W.R.	≤ 2.0
Antenna Gain	1.23dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	/
Cable Type	/
Connector Type	/
Connector Pull Test	/
Connector Torque Test	/
C. Environmental	
Operation Temperature	- 40 °C ~ + 80 °C
Storage Temperature	- 40 °C ~ + 80 °C

2. Characteristics and Reliability Test



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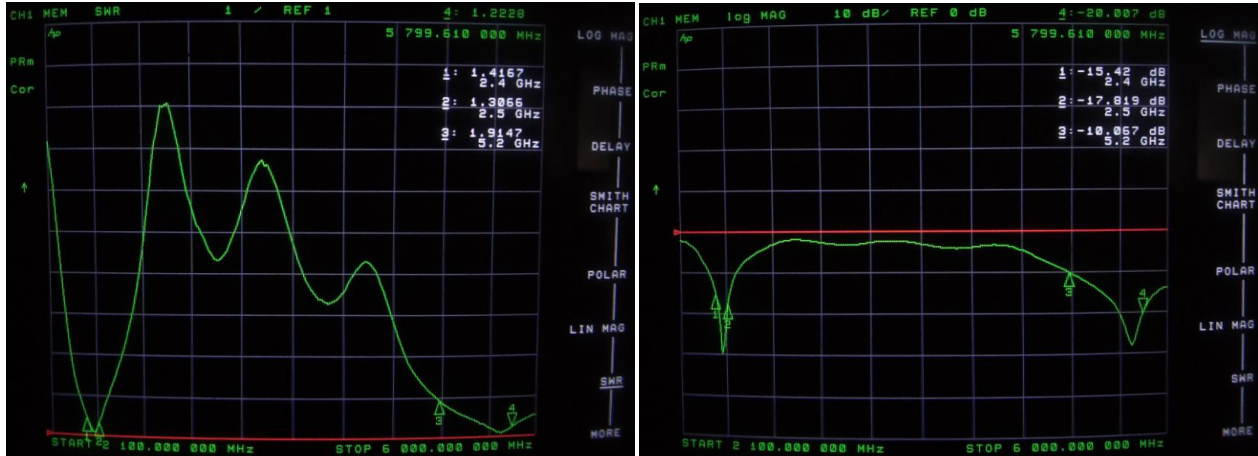
Product Name: Antenna

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	MIL-STD-202G, 201A Amplitude: 0.03 inch (0.76mm); Freq: 10 to 55 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	Height: 1.5 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	MIL-STD-202G, 210F, cond. A Solder iron: 350±10°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	MIL-STD-202G, 211A, cond. A Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	MIL-STD-202G, 211A, cond. E Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	MIL-STD-202G, 101E, cond. B Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	MIL-STD-202G, 103B, cond. B Temp: 40°C; RH: >= 95%; Time: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	MIL-STD-202G, 108A, cond. A Temp: 80°C; Time: 96 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2015/863/EU

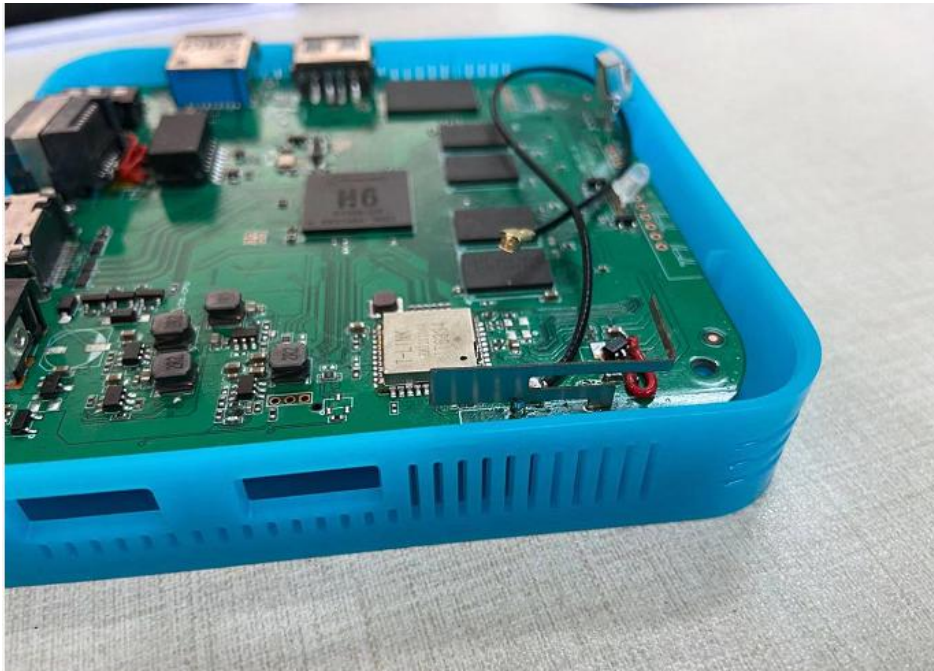
Product Number: AN2450-SNA250910-BZ

Product Name: Antenna

3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

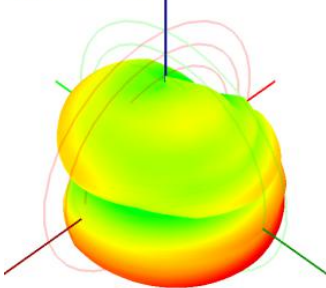


Passive Test For wifi/BT 2.4G						
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)
2400	56.15	-2.32	0.81	-1.25	0.81	-14.23
2460	61.28	-2.10	1.23	-0.92	1.23	-14.05
2500	58.22	-2.49	1.12	-1.03	1.12	-15.21

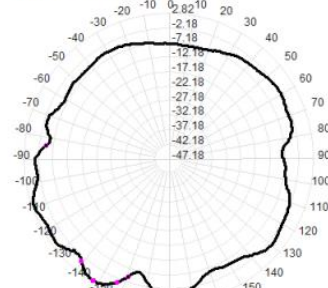
Product Number: AN2450-SNA250910-BZ

Product Name: Antenna

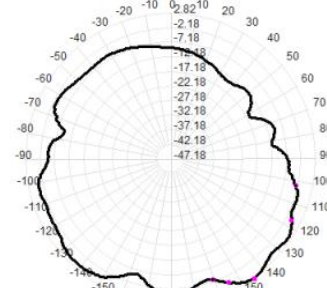
2400.0MHz H+V, Eff: 47.9%



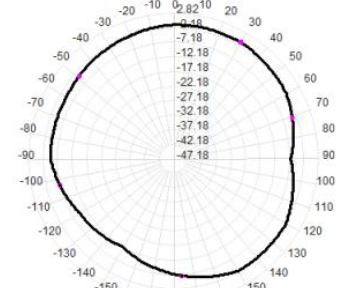
2400.0MHz Total(E1), Max= 2.05dBi



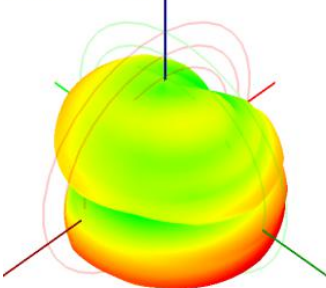
2400.0MHz Total(E2), Max= 2.82dBi



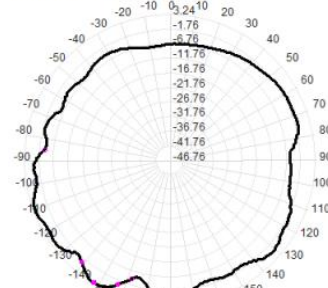
2400.0MHz Total(H), Max= -1.01dBi



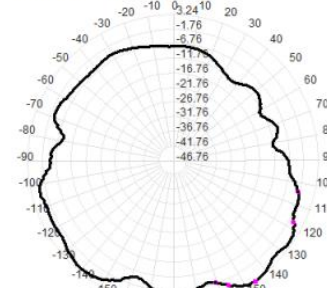
2450.0MHz H+V, Eff: 51.5%



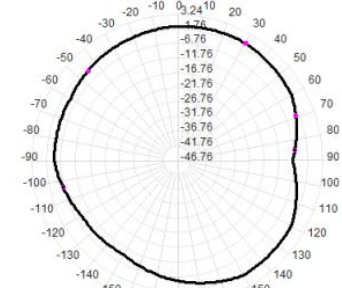
2450.0MHz Total(E1), Max= 2.54dBi



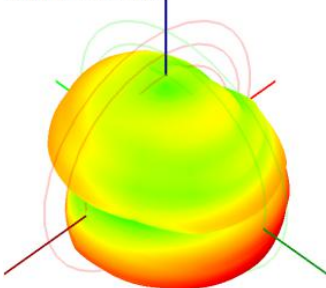
2450.0MHz Total(E2), Max= 3.24dBi



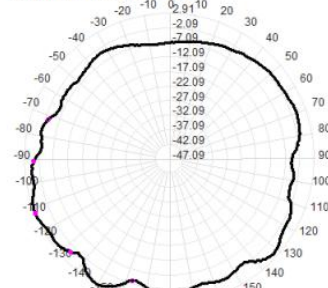
2450.0MHz Total(H), Max= -0.38dBi



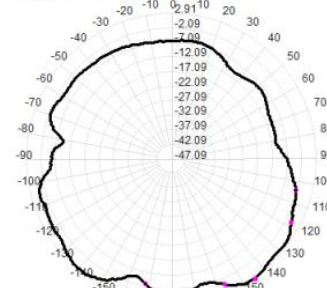
2500.0MHz H+V, Eff: 59.2%



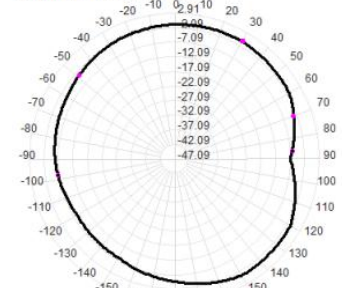
2500.0MHz Total(E1), Max= 2.81dBi



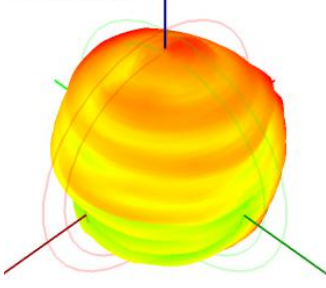
2500.0MHz Total(E2), Max= 2.91dBi



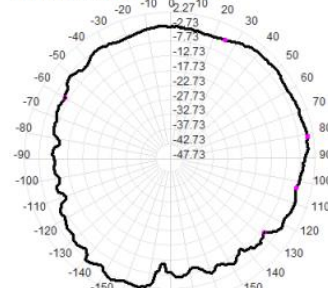
2500.0MHz Total(H), Max= -0.54dBi



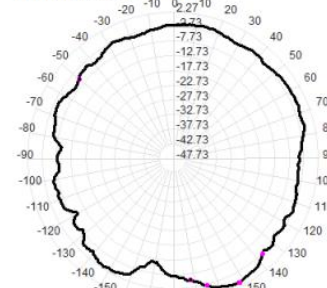
5150.0MHz H+V, Eff: 53.3%



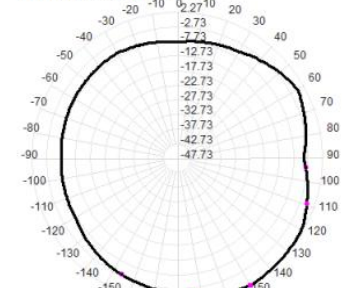
5150.0MHz Total(E1), Max= -0.04dBi



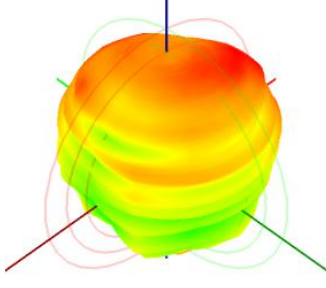
5150.0MHz Total(E2), Max= 0.27dBi



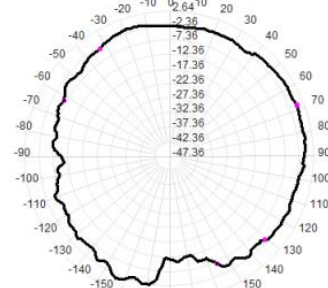
5150.0MHz Total(H), Max= 2.27dBi



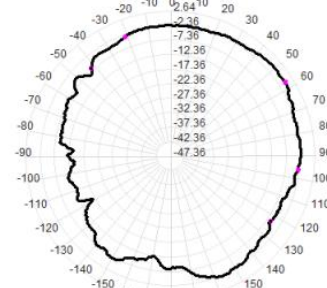
5850.0MHz H+V, Eff: 59.6%



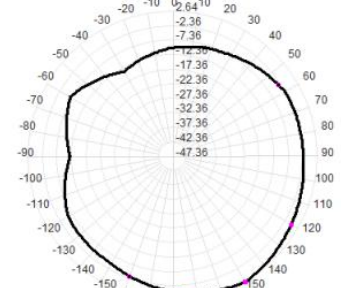
5850.0MHz Total(E1), Max= -0.12dBi



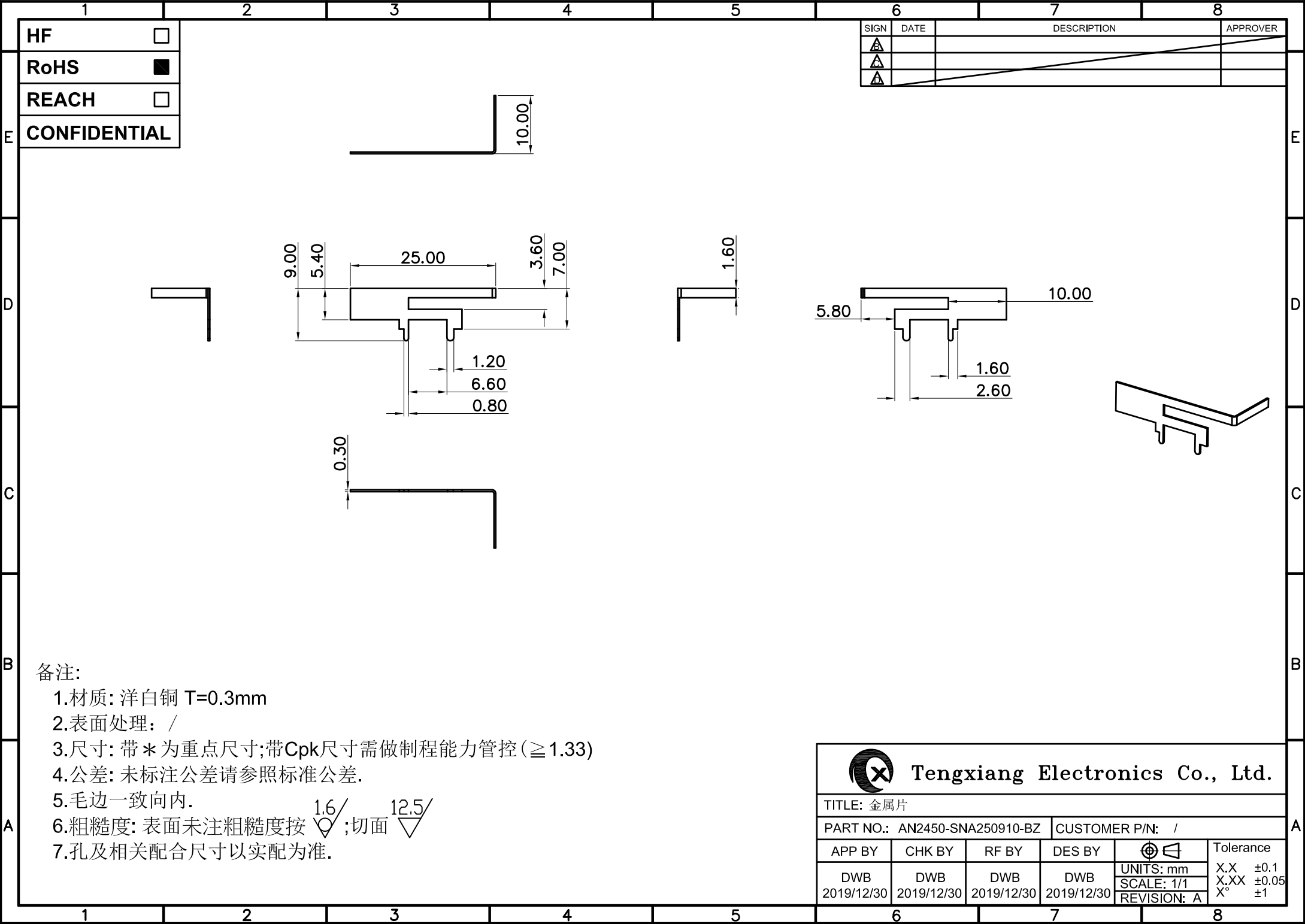
5850.0MHz Total(E2), Max= -0.32dBi



5850.0MHz Total(H), Max= 2.64dBi



5. Mechanical Drawing (See attached files)



HF ☐

RoHS ☒

REACH ☐

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

备注:

- 材质: 洋白铜 T=0.3mm
- 表面处理: /
- 尺寸: 带*为重点尺寸;带Cpk尺寸需做制程能力管控(≥ 1.33)
- 公差: 未标注公差请参照标准公差.
- 毛边一致向内.
- 粗糙度: 表面未注粗糙度按 $1.6/\sqrt{\text{ }}$;切面 $12.5/\sqrt{\text{ }}$
- 孔及相关配合尺寸以实配为准.

 Tengxiang Electronics Co., Ltd.					
TITLE: 金属片					
PART NO.: AN2450-SNA250910-BZ				CUSTOMER P/N: /	
APP BY	CHK BY	RF BY	DES BY		Tolerance
DWB	DWB	DWB	DWB		X.X ±0.1
2019/12/30	2019/12/30	2019/12/30	2019/12/30		X.XX ±0.05
					X° ±1

產品包裝規範

PACKING CRITERION

Date: 2019.12.30

Page: 1 of 1

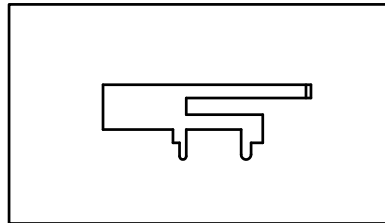
Part Number : AN2450-SNA250910-BZ

Revision : A

Name: 金属片 Antenna

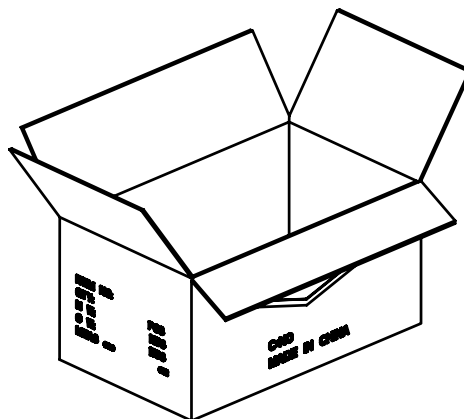
Customer : ALL

1 . Enter PE bag。



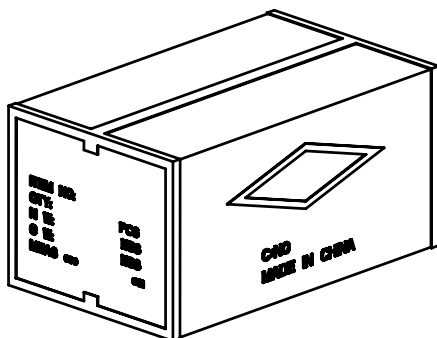
500pcs/ PE bag

2.PACKING 。

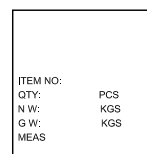


10000pcs/Carton

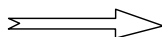
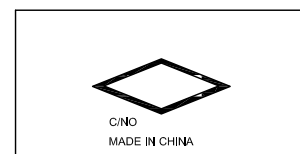
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWB