



Tengxiang Technology.Inc

Product Number: AN2450-23A01BO-B

Product Name: Antenna

Specification For Approval

Customer: 四海伽蓝

Customer P/N:

Tengxiang P/N: AN2450-23A01BO-B

Description : ANTENNA

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



腾祥电子
TENGXIANG ELECTRONIC

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<http://www.tenxiang.cn>

Product Number: AN2450-23A01BO-B

Product Name: Antenna

1. Specification

Sample Photo



A. Electrical Characteristics

Frequency	2400-2500MHz / 5150-5850 MHz
S.W.R.	≤ 2.0
Antenna Gain	2.0dBi
Polarization	Linear
Impedance	50 Ohm

B. Material & Mechanical Characteristics

Material of Radiator	Cu
Material of Plastic	/
Cable Type	1.13
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

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification

Product Number: AN2450-23A01BO-B

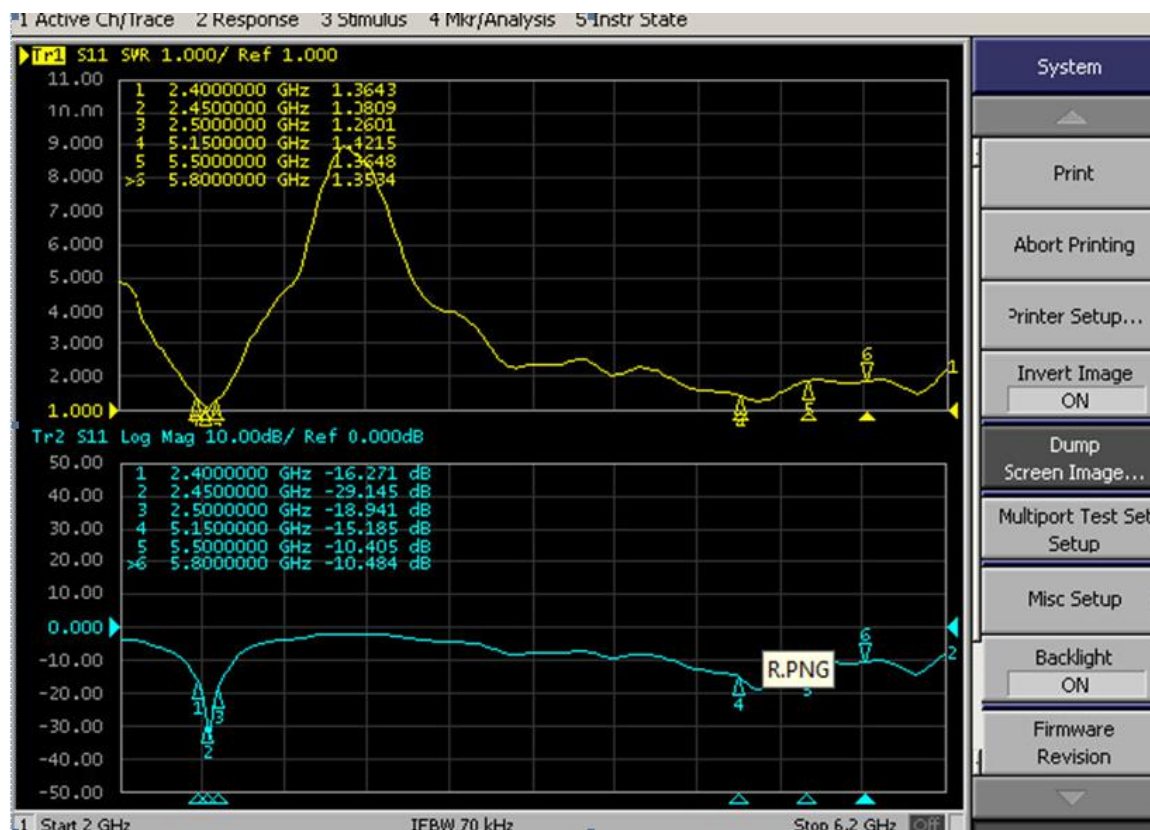
Product Name: Antenna

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: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. <= 5%
E3	Thermal Shock	1 Cycle: - 45°C (30 minutes) to + 85°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: 85°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 2020/863/EU

3. Antenna - S Parameter Test Data

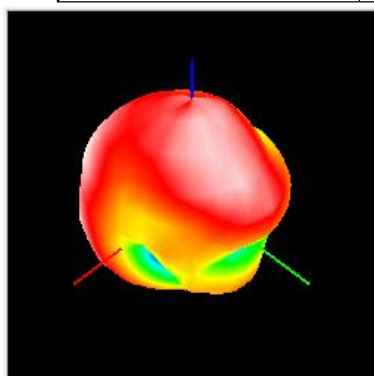
Product Number: AN2450-23A01BO-B

Product Name: Antenna



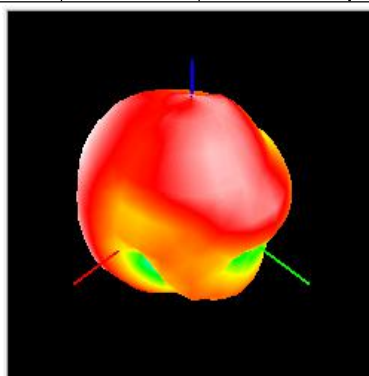
4. Antenna - Radiation Pattern Test Data

Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5550.0	5850.0
Efficiency (%)	60.5	70.4	67.9	55.2	65.9	59.4
Gain (dBi)	1.67	2.32	2.18	2.05	2.27	1.67



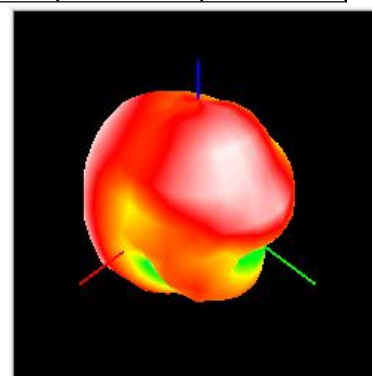
2400MHz

XY_Plane



2450MHz

XZ_Plane



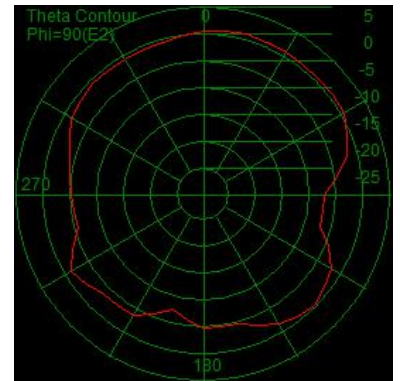
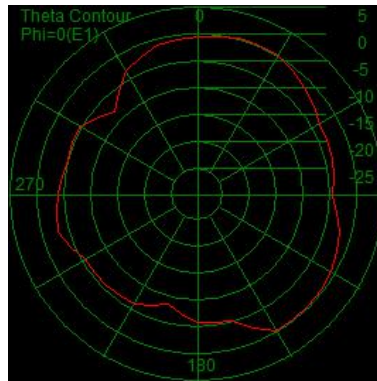
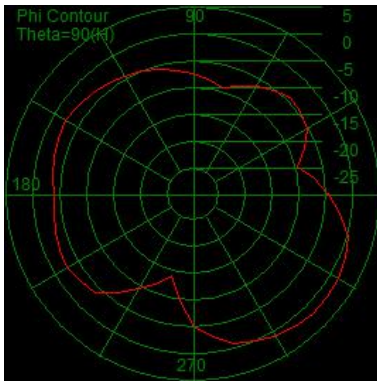
2500MHz

YZ_Plane

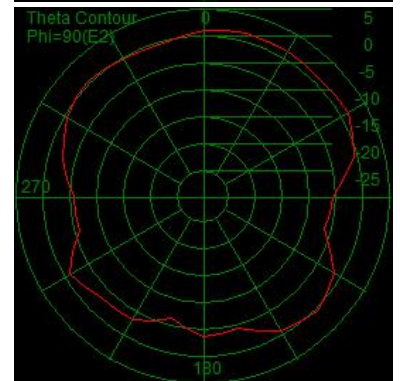
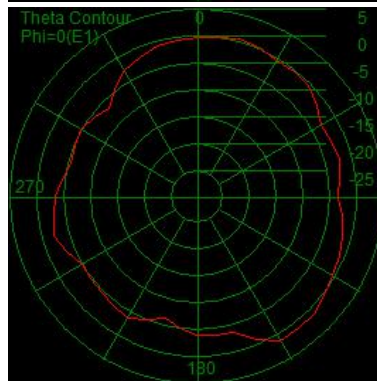
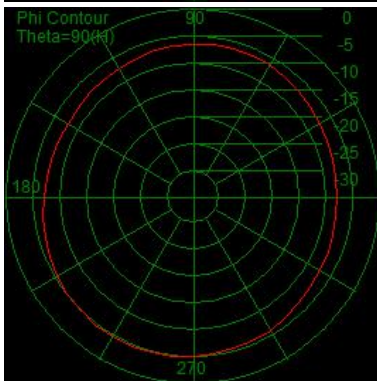
Product Number:AN2450-23A01BO-B

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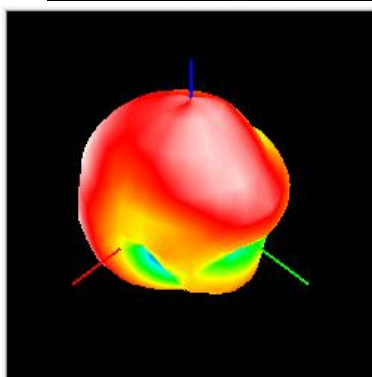
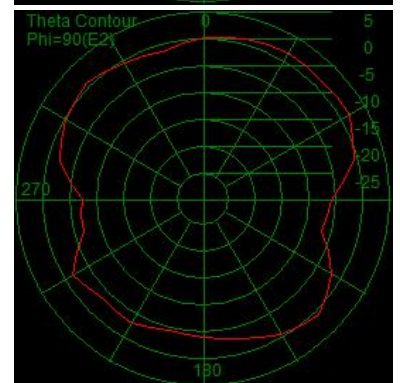
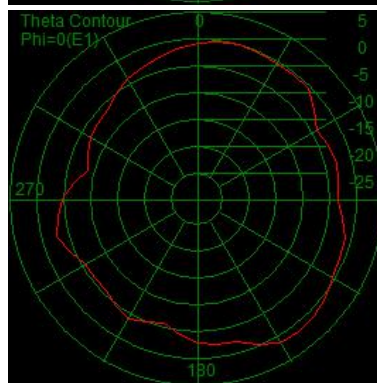
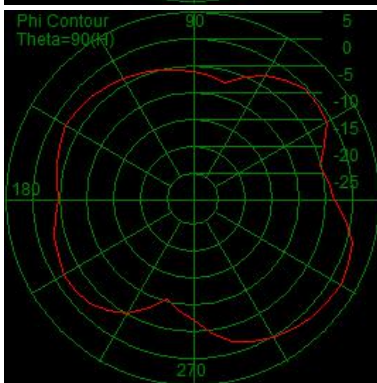
2400MHz



2450MHz

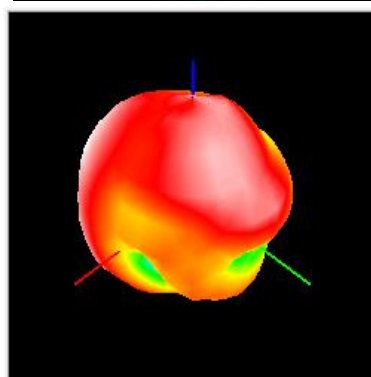


2500MHz



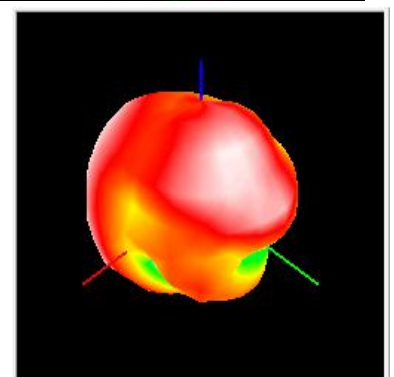
5150MHz

XY_Plane



5550MHz

XZ_Plane



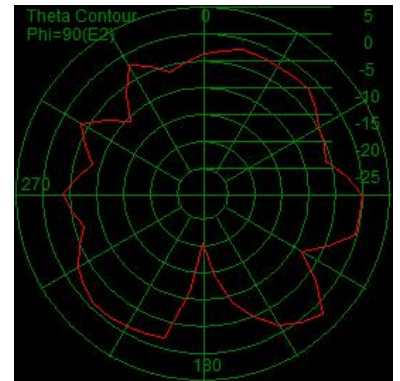
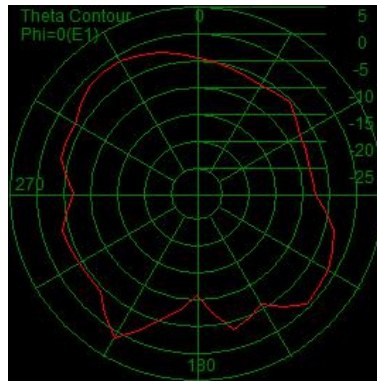
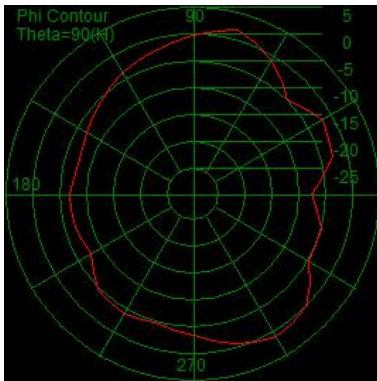
5850MHz

YZ_Plane

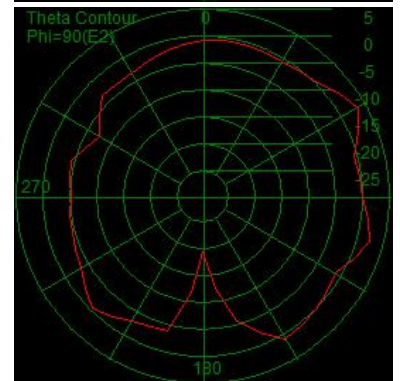
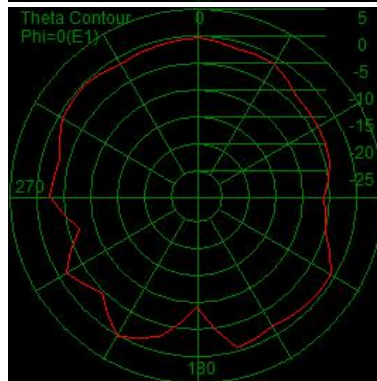
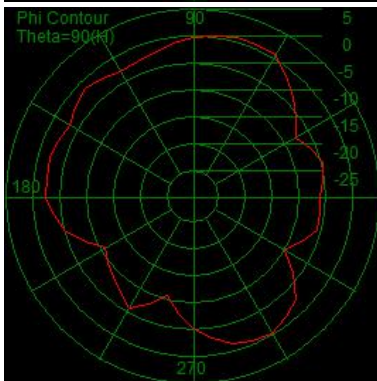
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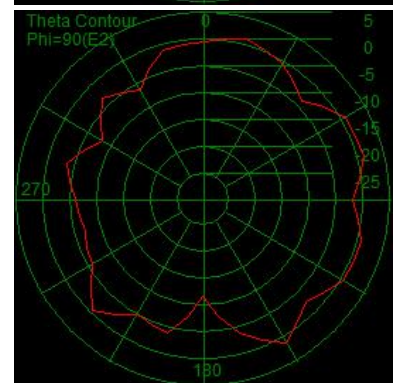
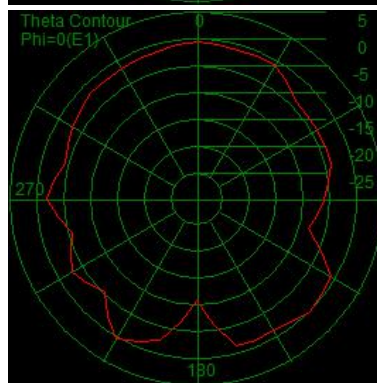
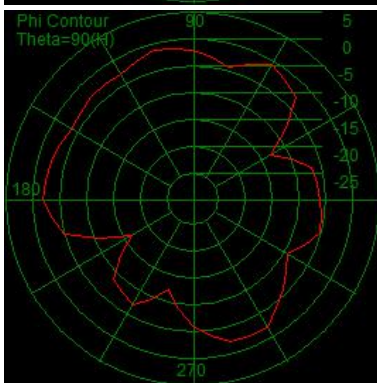
5150MHz



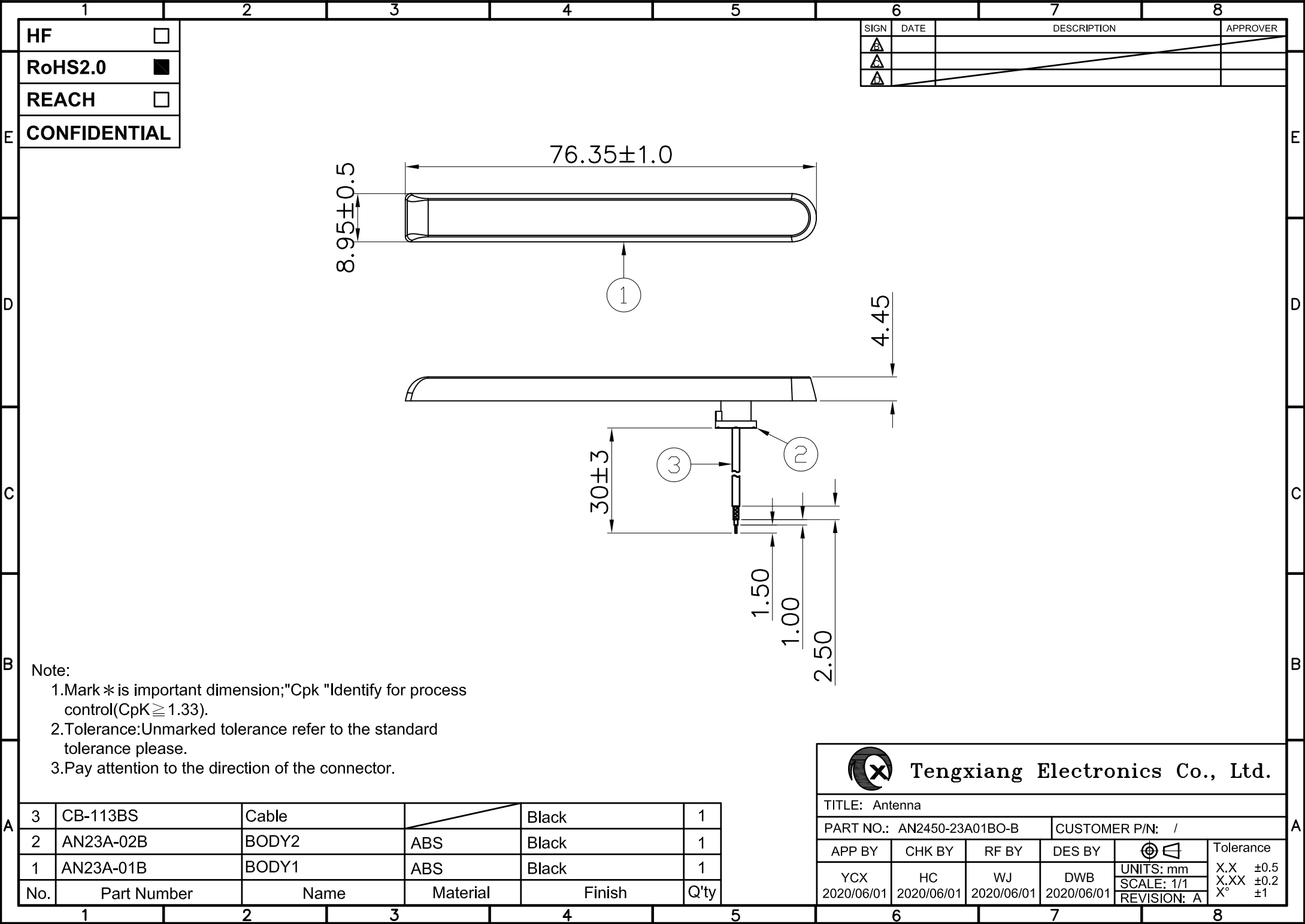
5550MHz



5850MHz



5. Mechanical Drawing (See attached files)



HF	☐
RoHS2.0	☒
REACH	☐
CONFIDENTIAL	

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

Note:
1.Mark * is important dimension;"Cpk "Identify for process control(CpK≥1.33).
2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
3.Pay attention to the direction of the connector.

3	CB-113BS	Cable		Black	1
2	AN23A-02B	BODY2	ABS	Black	1
1	AN23A-01B	BODY1	ABS	Black	1
No.	Part Number	Name	Material	Finish	Q'ty

 Tengxiang Electronics Co., Ltd.					
TITLE: Antenna					
PART NO.: AN2450-23A01BO-B				CUSTOMER P/N: /	
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	DWB	UNITS: mm	X.X ±0.5
2020/06/01	2020/06/01	2020/06/01	2020/06/01	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1

產品包裝規範

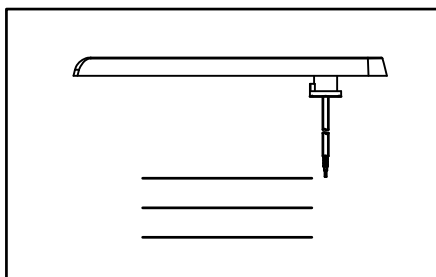
PACKING CRITERION

Date: 2020.06.01

Page: 1 of 1

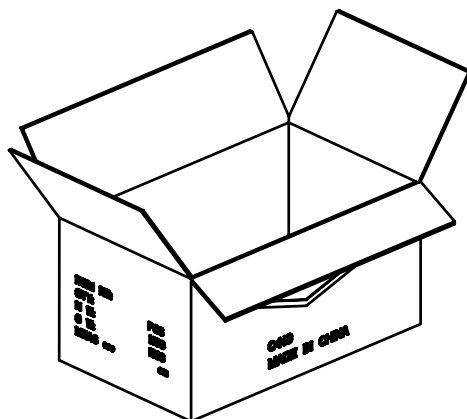
Part Number : AN2450-23A01BO-B	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



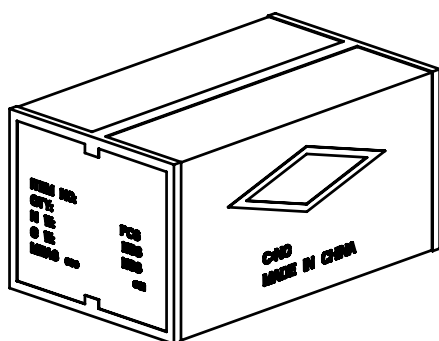
50pcs/ PE bag

2.PACKING 。

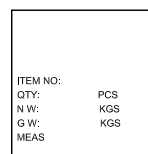


3000pcs/Carton

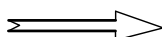
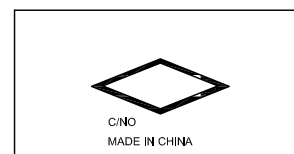
3. SEALING。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWB