



Tengxiang Technology.Inc

Product Number: AN2450-23D03BO-B

Product Name: Antenna

Specification For Approval

Customer: 四海伽蓝

Customer P/N:

PCBA P/N: AN2450-FPC490464

Tengxiang P/N: AN2450-23D03BO-B

Description : 23D Black antenna, OD0.81mmBlack wireL=20mm

Tengxiang Checked By:	Customer Approved By:
工程: DWF 射频: 韦佳 	



Tengxiang Technology.Inc

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<http://www.tenxiang.cn>

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400-2500MHz / 5150-5850 MHz
S.W.R.	Reference sample waveform
Antenna Gain	3.0 dBi / 3.0 dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	FPC
Material of Plastic	ABS
Cable Type	OD0.81mm, BLACK
Connector Type	/
C. Environmental	
Operation Temperature	- 25 °C ~ + 65 °C
Storage Temperature	- 25 °C ~ + 65 °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



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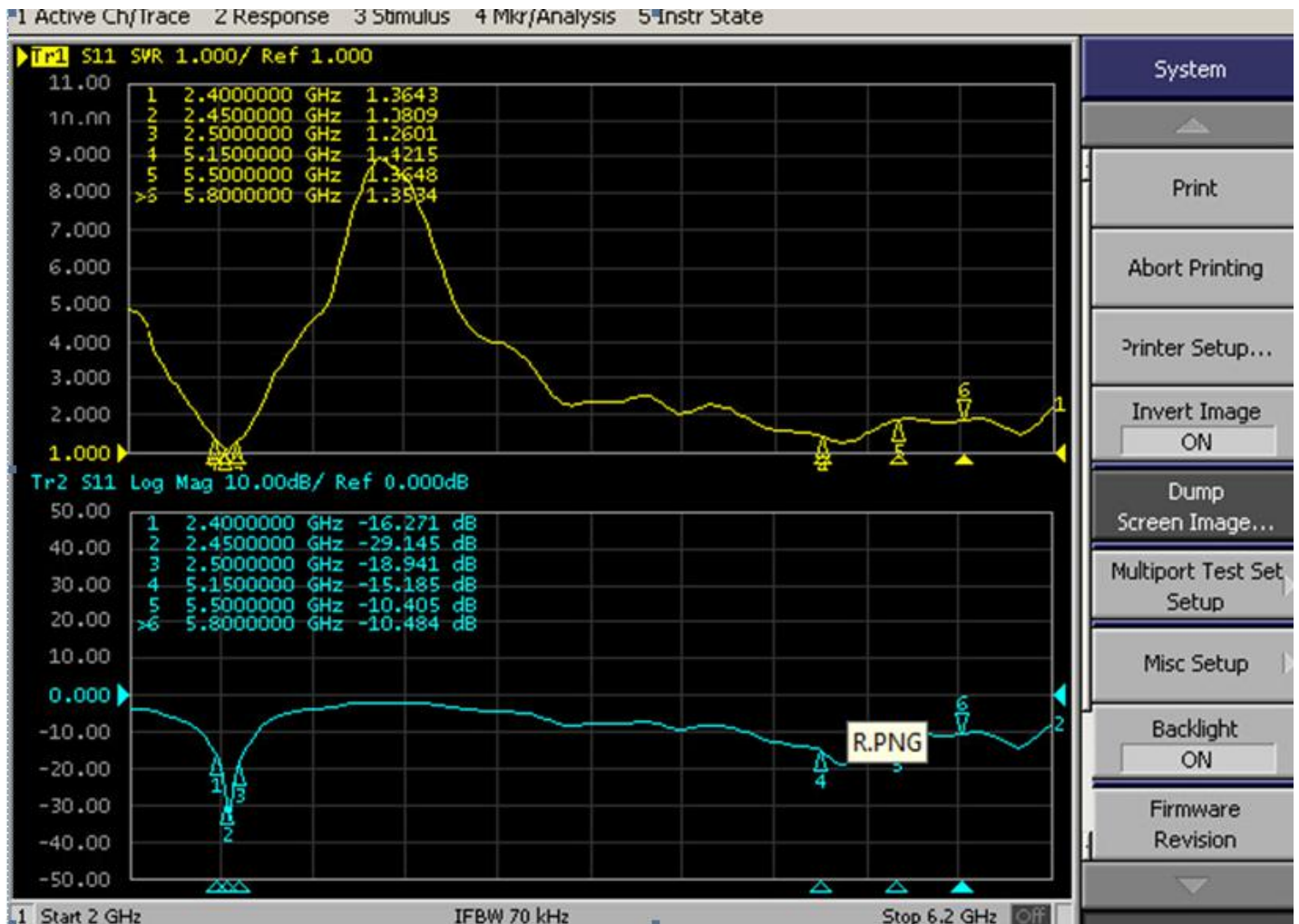
Product Name: Antenna

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: 65°C/12H; -25°C/12H;RH: >= 95%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 25°C (30 minutes) to + 65°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: 65°C; Time: 24 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

3. Antenna - S Parameter Test Data

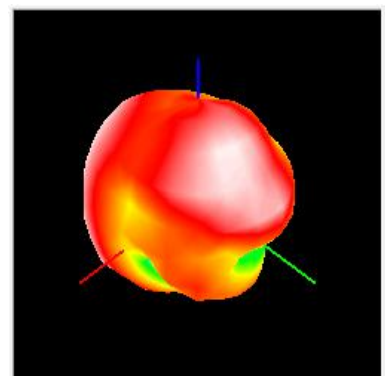
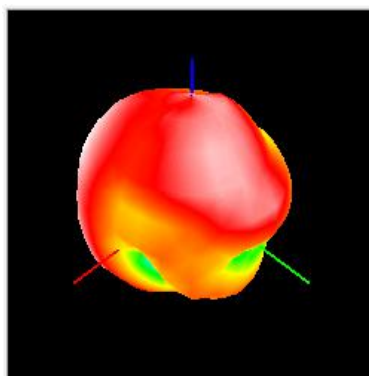
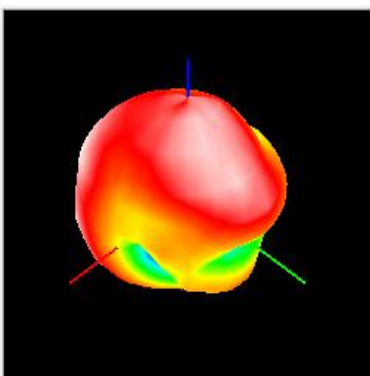
Product Number: AN2450-23D03BO-B

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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	3.00	2.18	3.00	2.27	1.67





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2400MHz

2450MHz

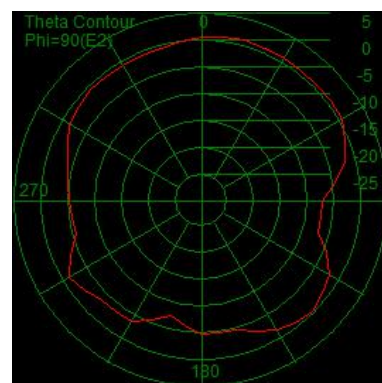
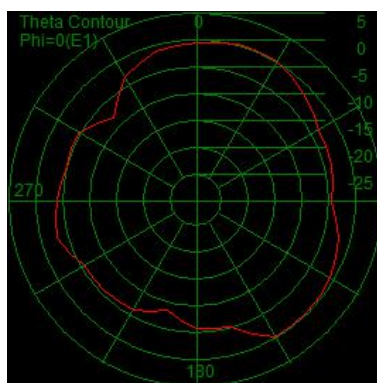
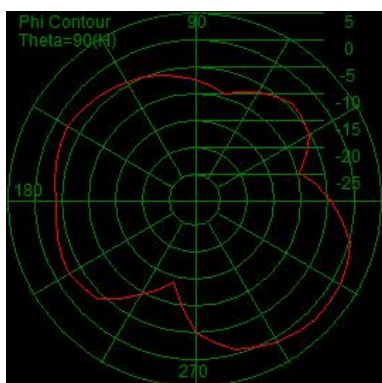
2500MHz

XY_Plane

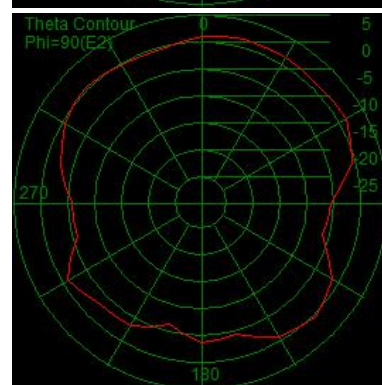
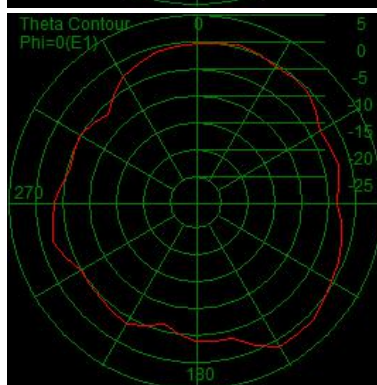
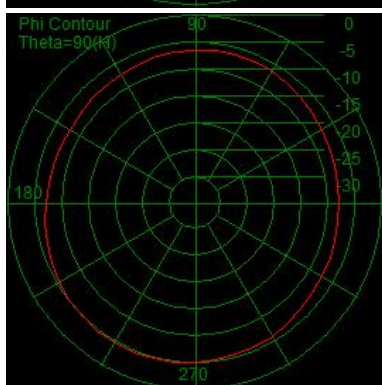
XZ_Plane

YZ_Plane

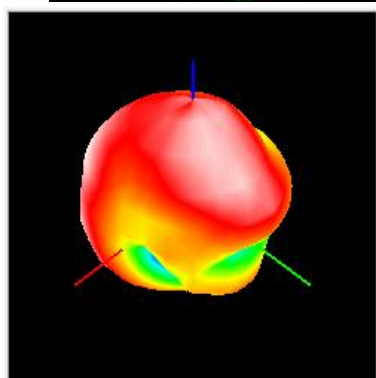
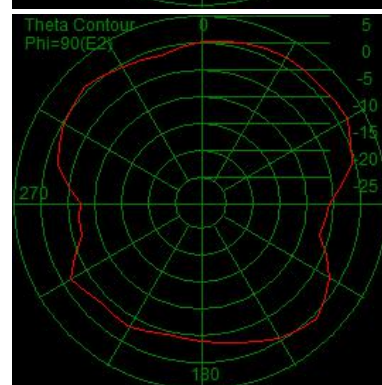
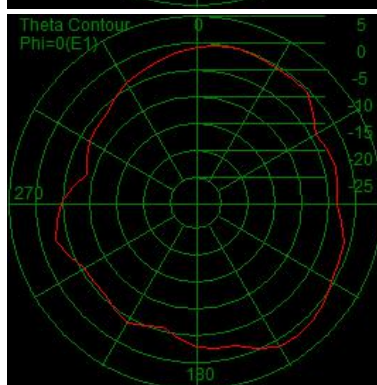
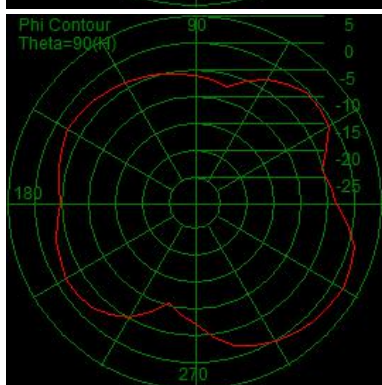
2400MHz



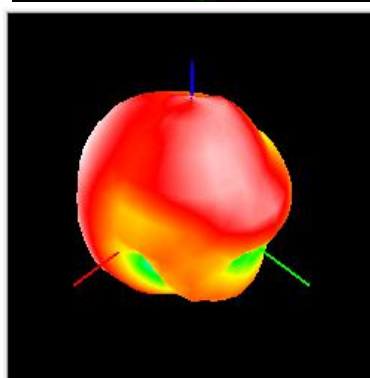
2450MHz



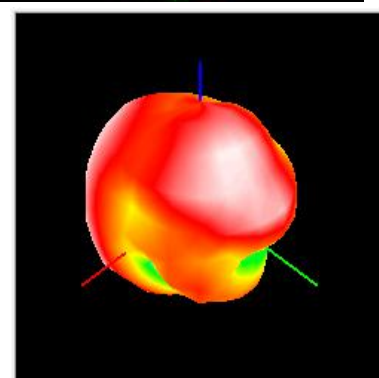
2500MHz



5150MHz



5550MHz



5850MHz

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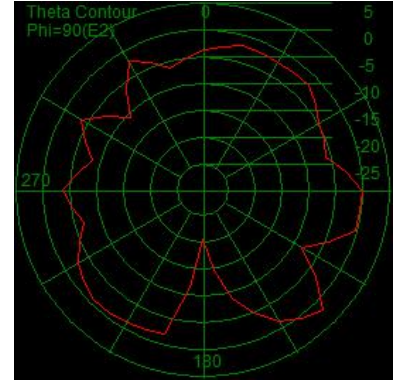
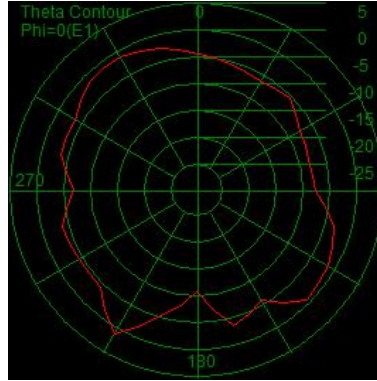
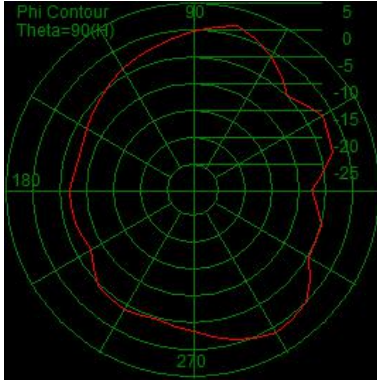
Product Name: Antenna

XY_Plane

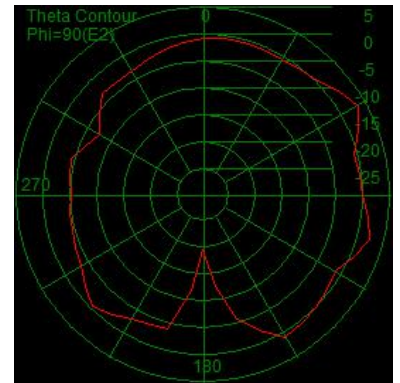
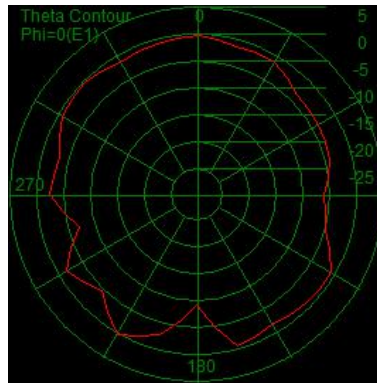
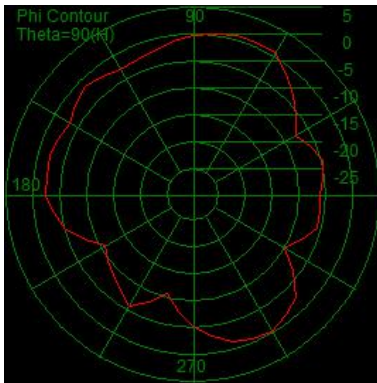
XZ_Plane

YZ_Plane

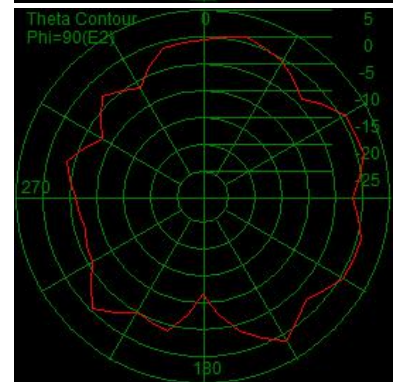
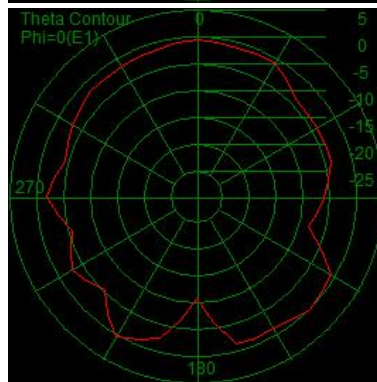
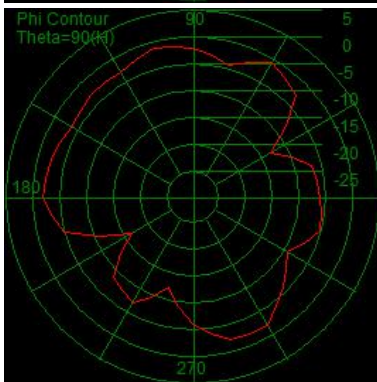
5150MHz



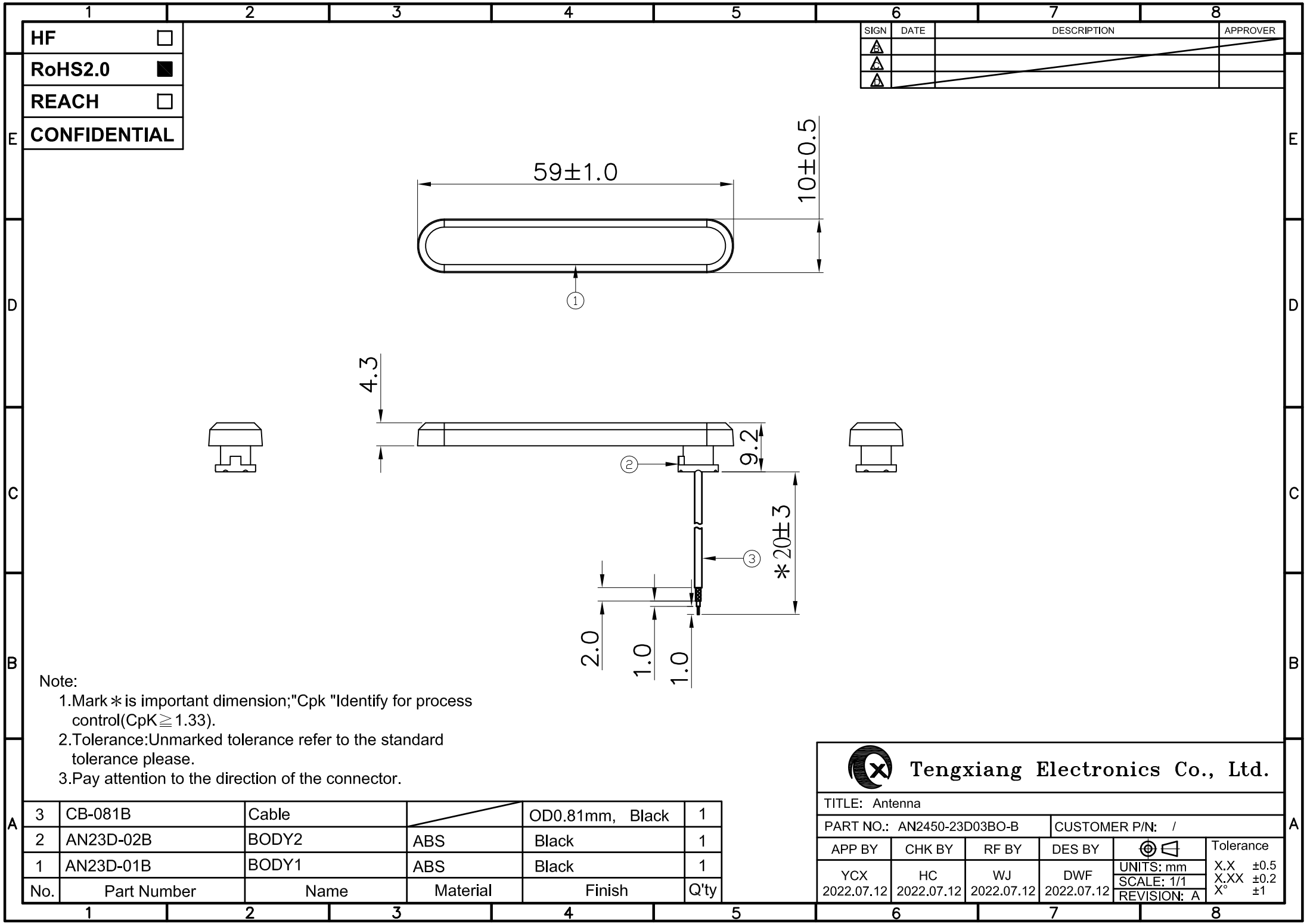
5550MHz



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($Cpk \geq 1.33$).
 - 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.
 - 3.Pay attention to the direction of the connector.

3	CB-081B	Cable		OD0.81mm, Black	1
2	AN23D-02B	BODY2	ABS	Black	1
1	AN23D-01B	BODY1	ABS	Black	1
No.	Part Number	Name	Material	Finish	Q'ty

 Tengxiang Electronics Co., Ltd.					
TITLE: Antenna					
PART NO.: AN2450-23D03BO-B				CUSTOMER P/N: /	
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX	HC	WJ	DWF	UNITS: mm	X.X ±0.5
2022.07.12	2022.07.12	2022.07.12	2022.07.12	SCALE: 1/1	X.XX ±0.2
				REVISION: A	X° ±1

產品包裝規範

PACKING CRITERION

Date: 2022.07.12

Page: 1 of 1

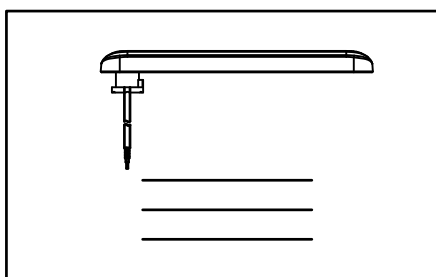
Part Number : AN2450-23D03BO-B

Revision : A

Name: Antenna

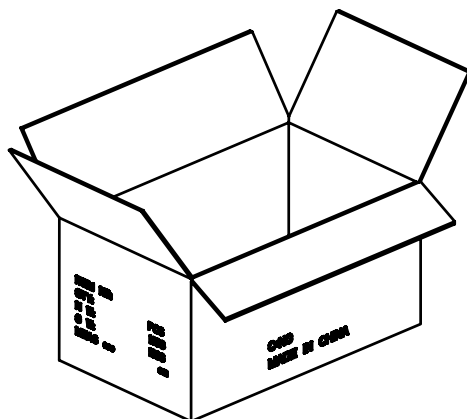
Customer : ALL

1 . Enter PE bag。



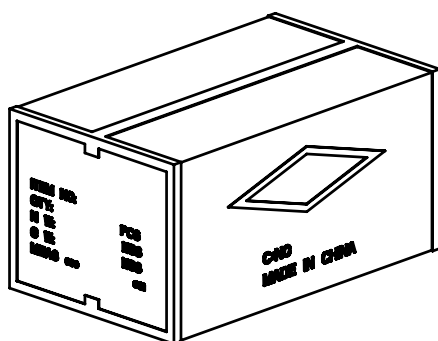
20pcs/ PE bag

2.PACKING 。



2000pcs/Carton

3. SEALING 。



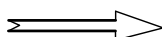
SIDE

ITEM NO:
QTY:
N W:
G W:
MEAS

PCS
KGS
KGS

FRONT

C/NO
MADE IN CHINA



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF