



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN2450-08BC04RS-B

Product Name: Antenna

Specification For Approval

Date: 2025.01.14

Version: 1.0

客户名称

Customer:

智路由

客户料号

Customer P/N:

腾祥料号

TX P/N:

规格描述

Description:

2.4/5G 双频黑色天线, SMA 公头母针

Tengxiang Checked By: 腾祥审核		Customer Approved By: 客户审核	
DRAWN 制作	路婷	TESTED BY 检测	
CHECKED BY 审核	胡超	CHECKED BY 审核	
Q.C.DEPT. 品管	周志红	Q.C.DEPT. 品管	
APPROVED BY 核准	韦佳	APPROVEDBY 核准	



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Index:

1. Specification (规格)
2. Characteristics and Reliability Test (产品特性和可靠性测试标准)
3. Antenna - S Parameter Test Data (样品测试数据)
4. Antenna - Radiation Pattern Test Data (辐射模式测试数据)
5. Mechanical and Packing Drawing (图纸包装规范)

Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.01.14	初版	

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500MHz /5150-5850MHz
S.W.R. 驻波比	≤ 2.5 / ≤ 2.5
Antenna Gain 增益	2.26dBi / 2.92 dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	ABS/POM
Cable Type 线材规格	RG178
Connector Type 连接器规格	RP SMA Plug (公头母针)
C. Environmental	
Storage Temperature 存储温度	- 30 °C ~ +65 °C
Operation Temperature 工作温度	- 30 °C ~ +65 °C
Antenna Color Storage life 天线颜色存储寿命	< 2 year

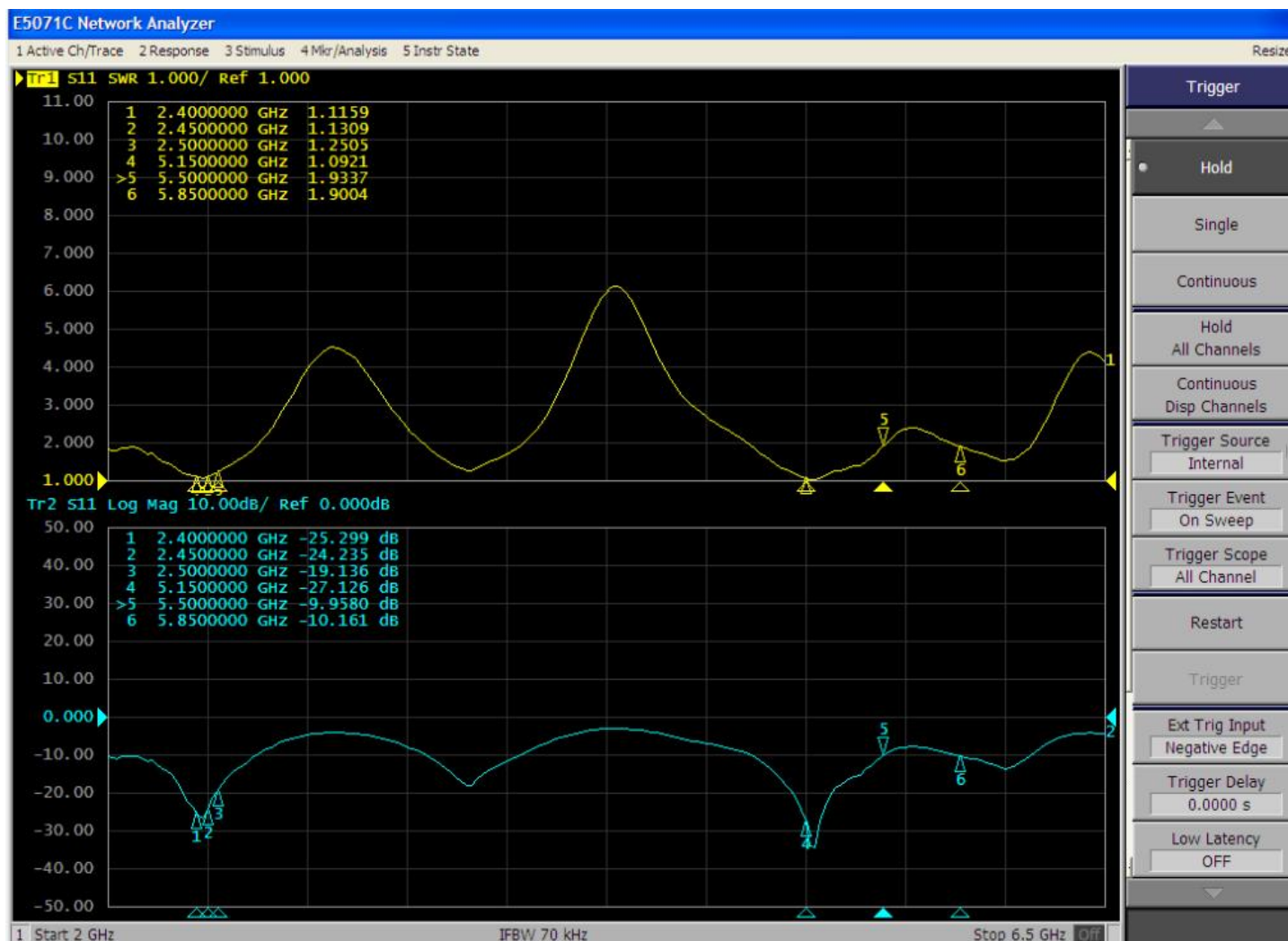
2. Characteristics and Reliability Test

Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
3	Pull Test 拉力	Holding with individual specification; force applied to axis of terminal 单独定义产品端子拉力	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$ 符合待测物规范; 频率偏移 $\leq 5\%$	PASS
4	Torque Test 扭力	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal 单独定义产品端子之顺时针及逆时针扭力	1. Directive DUT specification 2. Frequency Tol. $\leq 5\%$ 符合待测物规范; 频率偏移 $\leq 5\%$	PASS
5	Dimension 尺寸	Inspection of dimension, color, material, package, surface process. 检查尺寸, 颜色, 材料, 包装, 表面处理	Directive DUT specification 符合待测物规范	PASS
6	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: $\geq 95\%$; NaCl solution: $\geq 5\%$; Time: 24H 温度 35°C; 湿度 $\geq 95\%$; 盐水浓度 $\geq 5\%$; 测试 24H	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
7	Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 65°C / 12 H; -30°C / 12H RH: $\geq 90\%$; Time: 24H 温度 65°C 测试 12H 转 -30°C 测试 12H; 湿度 $\geq 90\%$; 时间 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 恢复 2H 后, 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
8	Aging test 老化	GB / T 2423.2 - 2008 Temp: 65°C; Time: 24 hours 温度 65°C, 测试 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol. $\leq 5\%$ 无明显外观不良; 频率偏移 $\leq 5\%$	PASS
9	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2011/65/EU 符合 RoHS 2015/863/EU 标准	PASS

Product Number: AN2450-08BC04RS-B

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3. Antenna - S Parameter Test Data



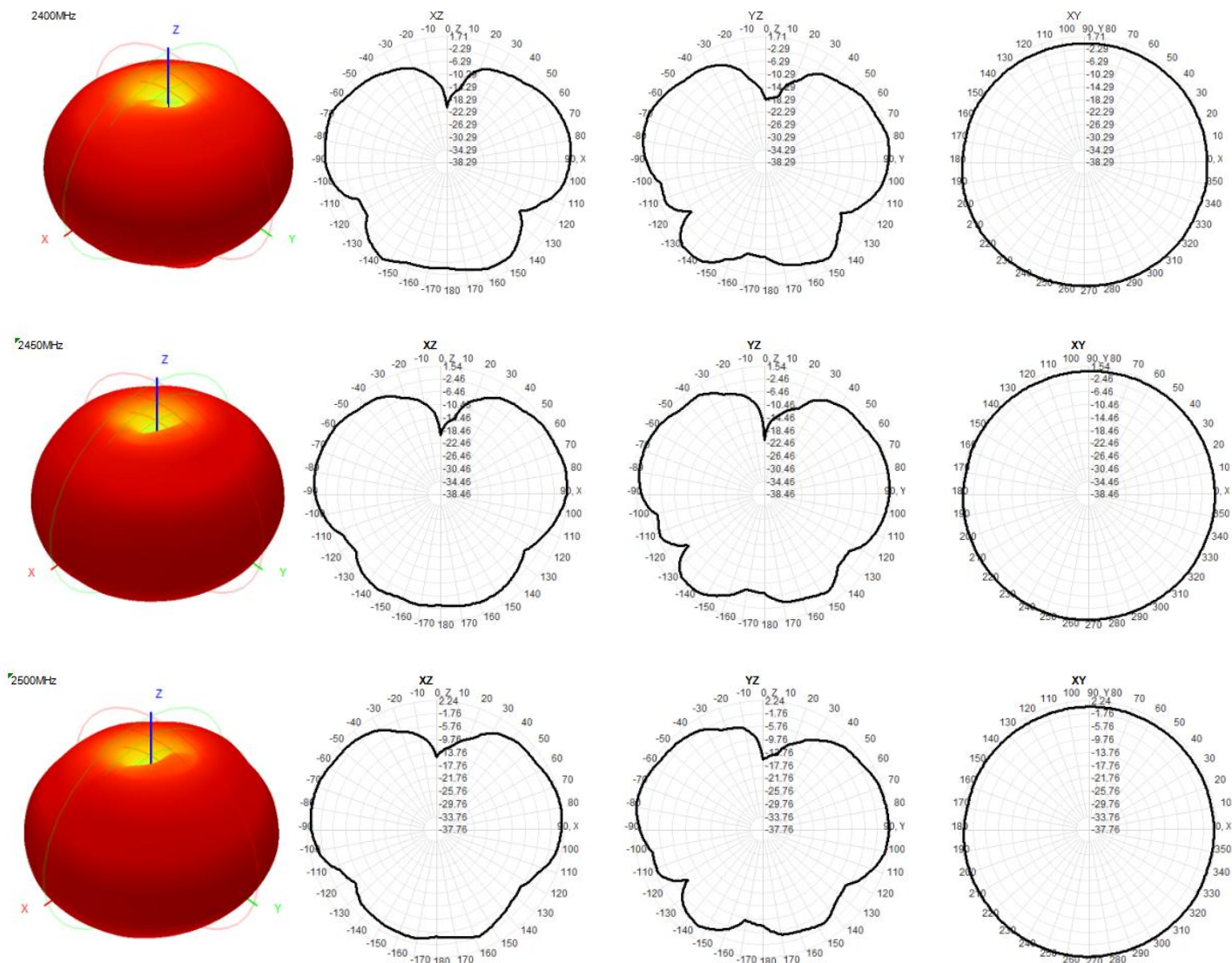
4. Antenna - Radiation Pattern Test Data

Frequency ID	1	2	3	4	5	6	7	8	9	10	11
Frequency (MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
Gain (dBi)	2.01	2.04	2.05	2.15	2.23	2.26	2.25	2.17	2.09	2.10	2.06
Efficiency (%)	70.93	73.65	75.18	75.13	76.05	78.12	77.60	76.73	74.53	73.15	72.46

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
5150.0	5200.0	5250.0	5300.0	5350.0	5400.0	5450.0	5500.0	5550.0	5600.0	5650.0	5700.0	5750.0	5800.0	5850.0
2.37	2.40	2.47	2.54	2.56	2.61	2.71	2.89	2.92	2.87	2.77	2.79	2.69	2.63	2.41
63.82	63.44	64.98	65.61	66.15	66.79	66.82	67.44	67.51	66.60	66.29	65.31	65.71	64.92	63.33

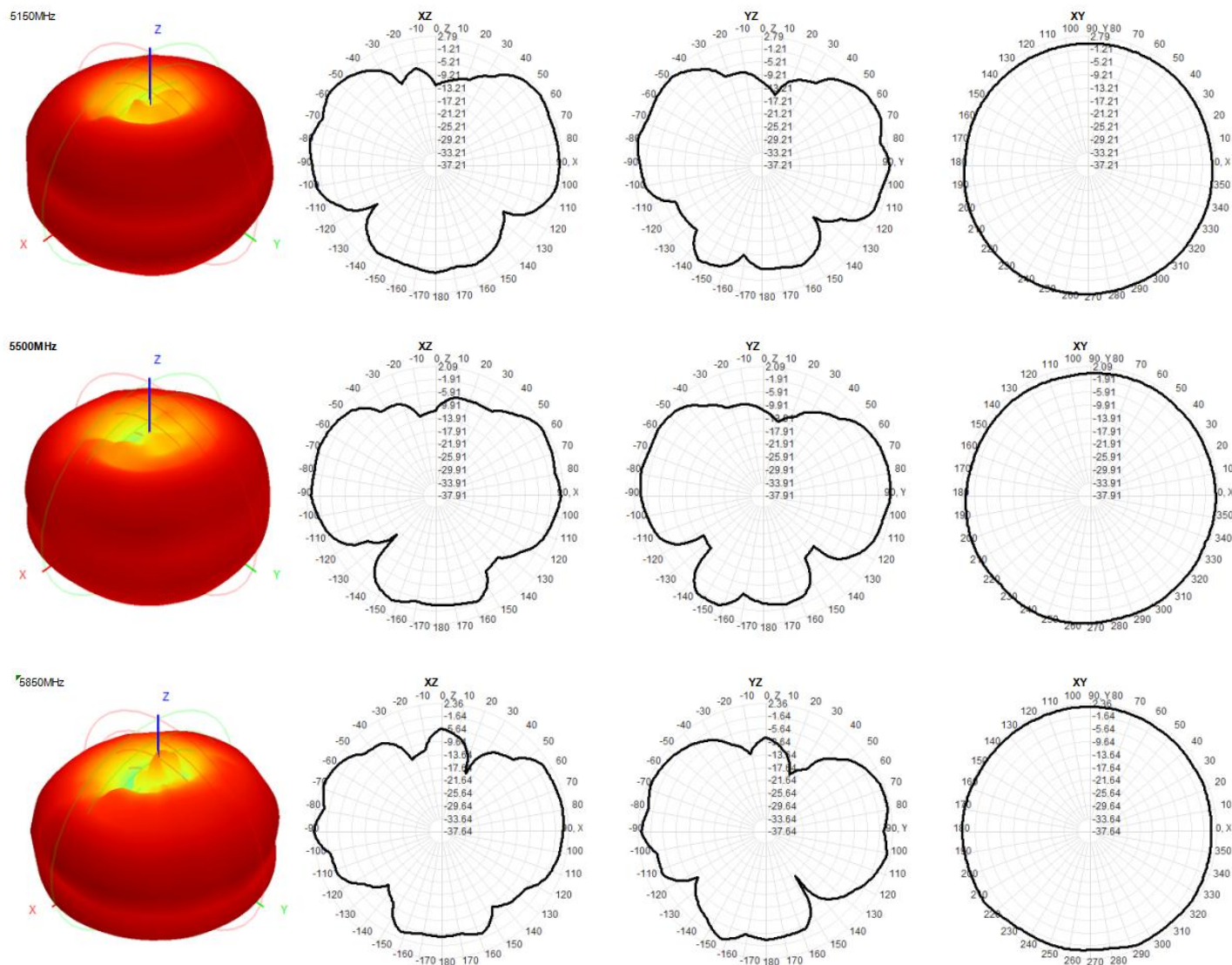
Product Number: AN2450-08BC04RS-B

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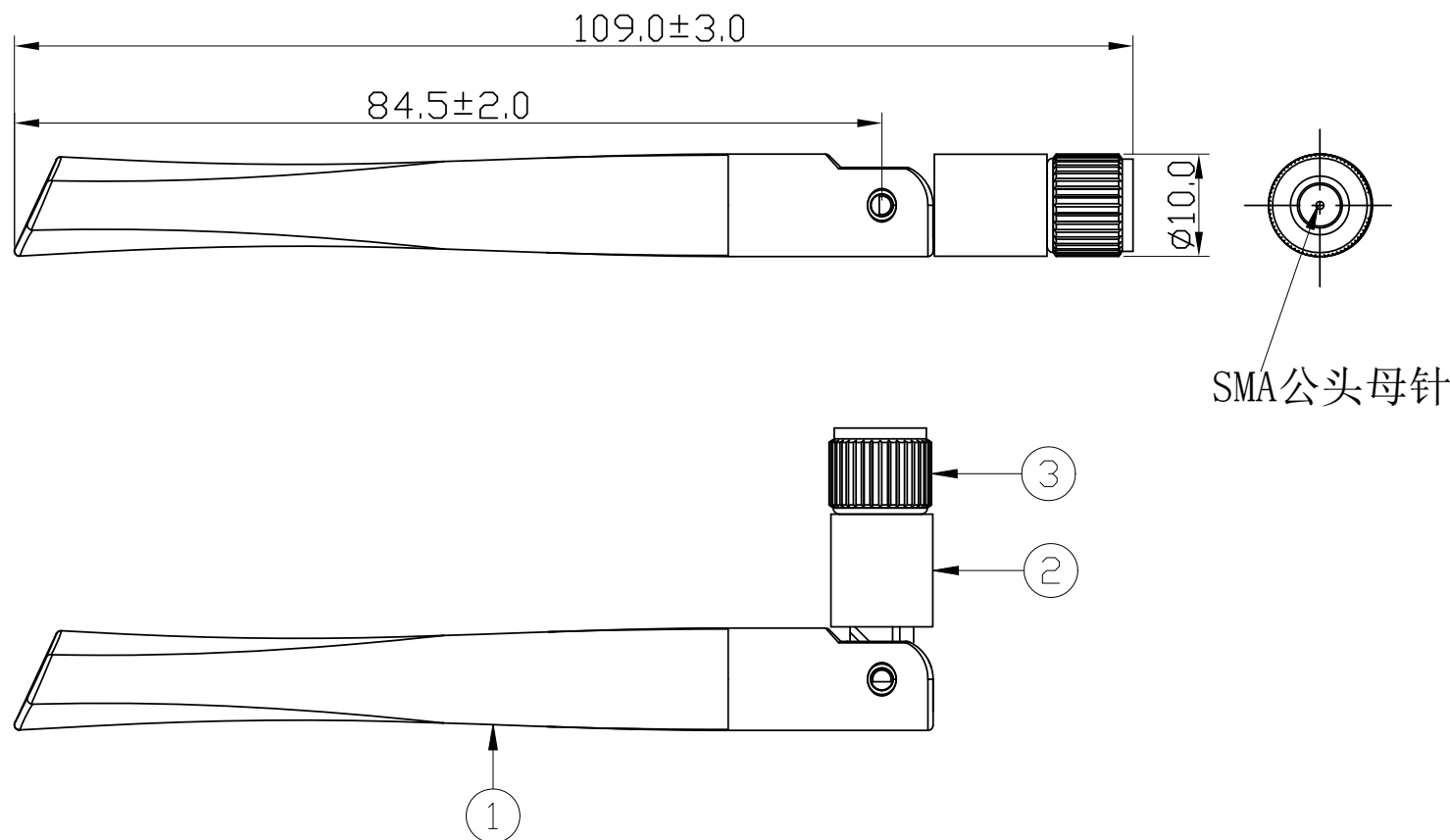


5. Mechanical Drawing See attached files

RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



Note:

1. Dimension: Take * is the important dimension
2. Tolerance: Unmarked tolerance refer to the standard tolerance please

3	SMA-MC-8710B	RP SMA PLUG	POM	Black	1
2	ANT05-01B	Body2	ABS	Black	1
1	AN39-03B-P	Body1	ABS	Black	1
No.	Part Number	Name	Material	Finish	Q'ty



Tengxiang Technology Inc.

TITLE: 2.4/5G Antenna

PART NO.: AN2450-08BC04RS-B

DWG NAME:

APP BY	CHK BY	RF BY	DES BY	UNITS: mm	Tolerance
YCX	HC	WJ	dwf	SCALE: 1/1	X.X ±0.5
2025.01.14	2025.01.14	2025.01.14	2025.01.14	REVISION: A	X.XX ±0.2
					X° ±1

產品包裝規範

PACKING CRITERION

Date:2025.01.14

Page: 1 of 1

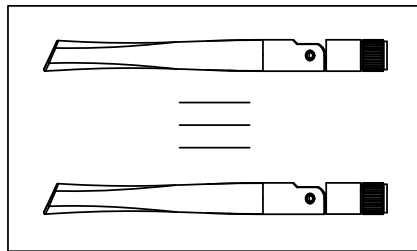
Part Number : AN2450-08BC04RS-B

Revision : A

Name: Antenna

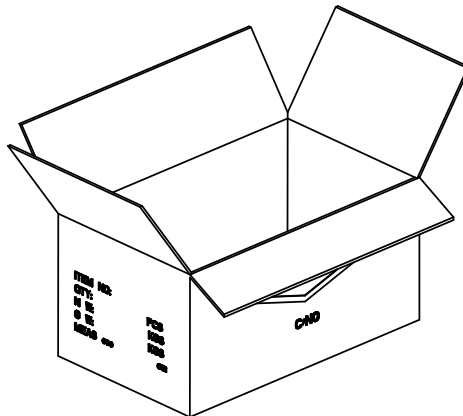
Customer : ALL

1 . Enter PE bag。



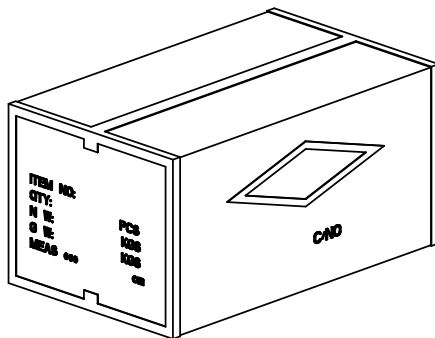
50pcs/ PE bag

2.PACKING 。

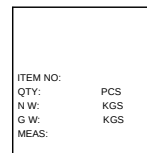


1000pcs/Carton

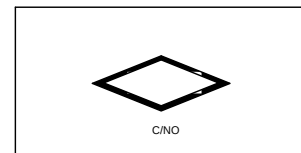
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : DWF