Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AB0821-4306SM-3M
Product Name: Antenna

Specification For Approval

Date: 2025.3.17

Version: 1.1

客 户 名 称
Customer：

客 户 料 号
Customer P/N：

腾 祥 料 号
T X P/N： **AB0821-4306SM-3M**

规 格 描 述
Description : **4G 吸盘天线 RG174 黑色线 L=3m+SMA 公头公针**

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	

东莞市腾祥电子有限公司 工程部

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Product Number: AB0821-4306SM-3M
Product Name: Antenna

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Revision History（变更履历）

Revision	Date	Change Notification	Description
1.0	2025.3.17	初版	

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Product Number: AB0821-4306SM-3M

Product Name: Antenna

1. Specification

Sample Photo	
A. Electrical Characteristics	
Frequency 频率	**824-960MHz/1710-2170 MHz**
S.W.R. 驻波比	**<= 3.0**
Antenna Gain 增益	**3.77dBi /4.21dBi**
Polarization 极化方式	**Linear**
Impedance 阻抗	**50 Ohm**
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	**ABS**
Cable Type 线材规格	**RG174**
Connector Type 连接器规格	**SMA PIUG**
C. Environmental	
Storage Temperature 存储温度	**- 35 ˚C ~ + 75 ˚C**
Operation Temperature 工作温度	**- 35 ˚C ~ + 75 ˚C**

Product Number: AB0821-4306SM-3M
Product Name: Antenna

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.≤5% 符合待测物规范;频率偏移≤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.≤ 5% 符合待测物规范;频率偏移≤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: ≥ 95%; NaCl solution: ≥ 5%;Time: 24H 温度 35°C；湿度≥95%;盐水浓度≥5%；测试 24H	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
7	Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 75°C / 12 H; -35°C / 12H RH: ≥ 90%; Time: 24H 温度 75°C 测试 12H 转-35°C 测试 12H；湿度≥ 90%；时间 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 恢复 2H 后，无明显外观不良;频率偏移≤5%	PASS
8	Aging test 老化	GB /T 2423.2 - 2008 Temp:75°C; Time: 24 hours 温度 75° C，测试 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤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

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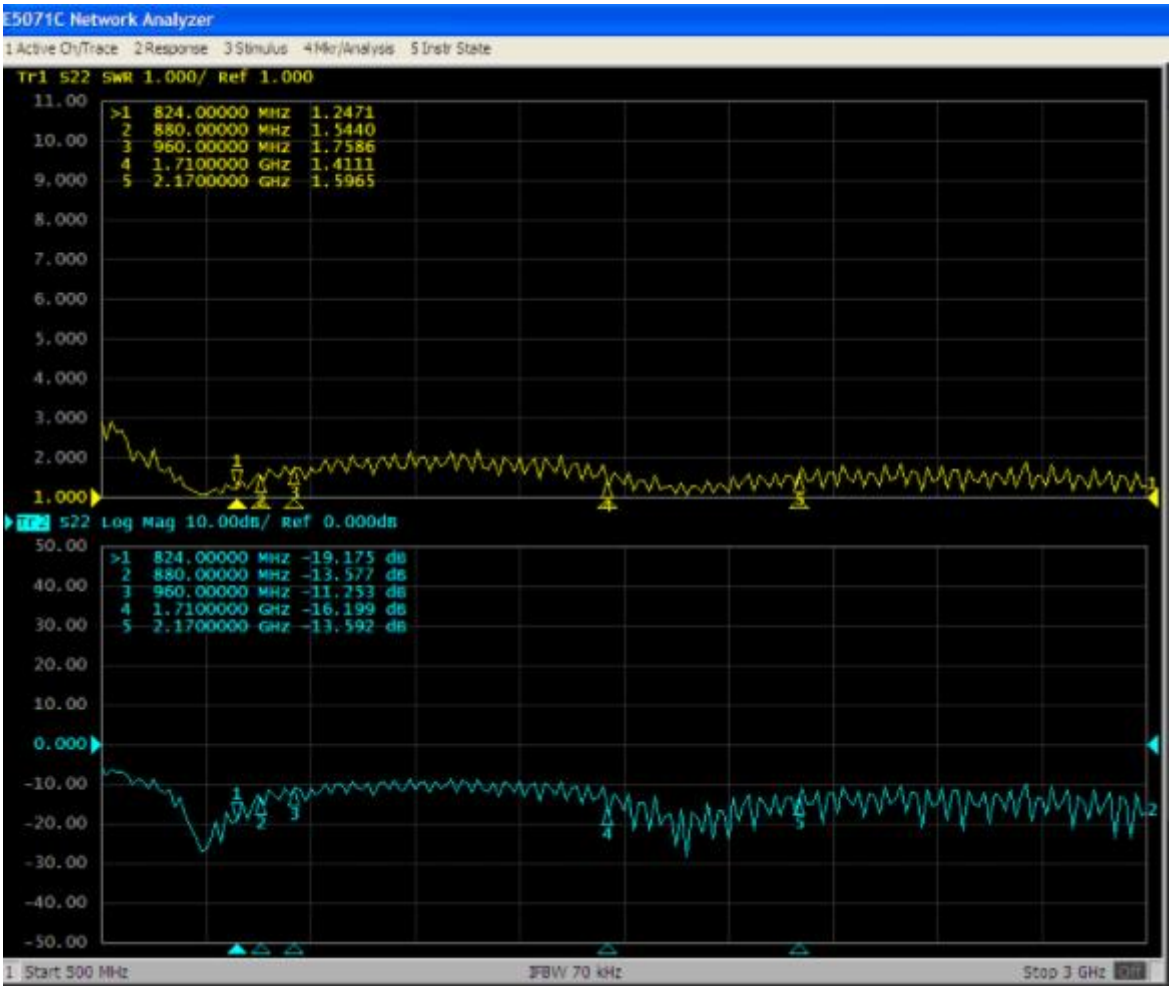
Product Name: Antenna

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	12	13	14	15	16
Frequency (MHz)	824.0	858.0	892.0	926.0	960.0	1710.0	1756.0	1802.0	1848.0	1894.0	1940.0	1986.0	2032.0	2078.0	2124.0	2170.0
Gain (dBi)	1.30	1.38	1.00	1.51	1.77	3.14	3.38	3.40	3.30	4.08	3.81	4.21	4.15	3.47	3.45	3.25
Efficiency (%)	59.77	53.38	55.37	59.24	64.00	52.96	59.27	70.93	73.86	74.19	67.77	64.04	59.70	51.32	51.78	52.01

Product Number: AB0821-4306SM-3M
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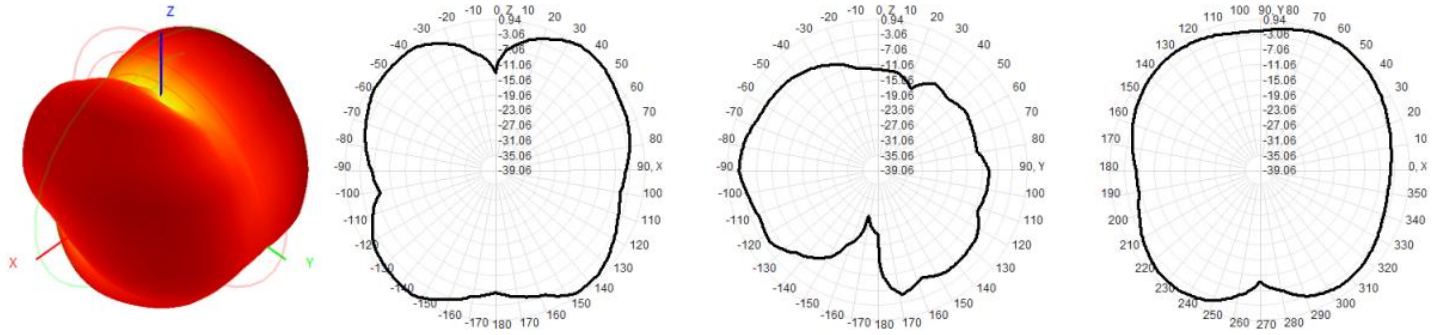
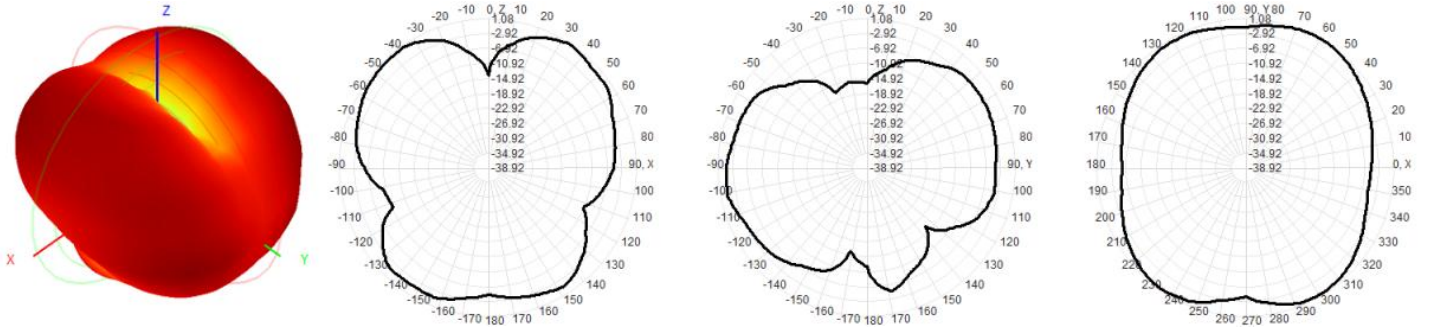
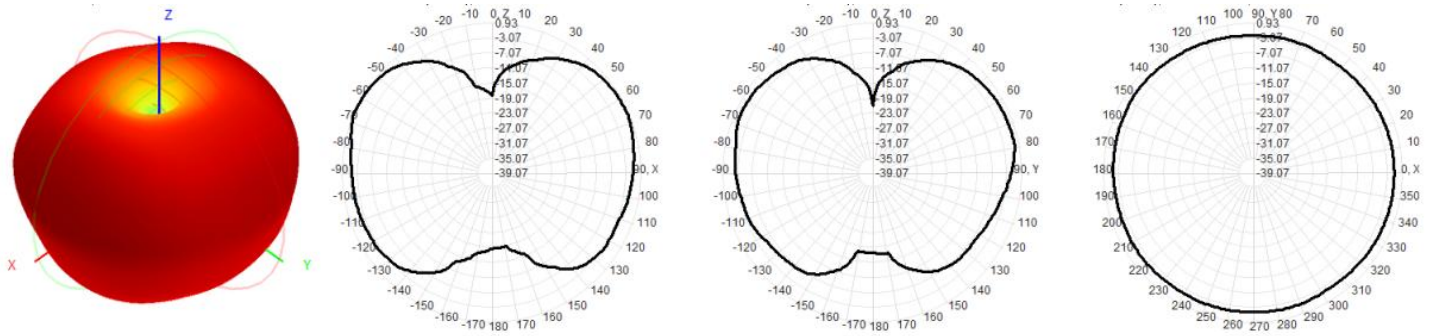
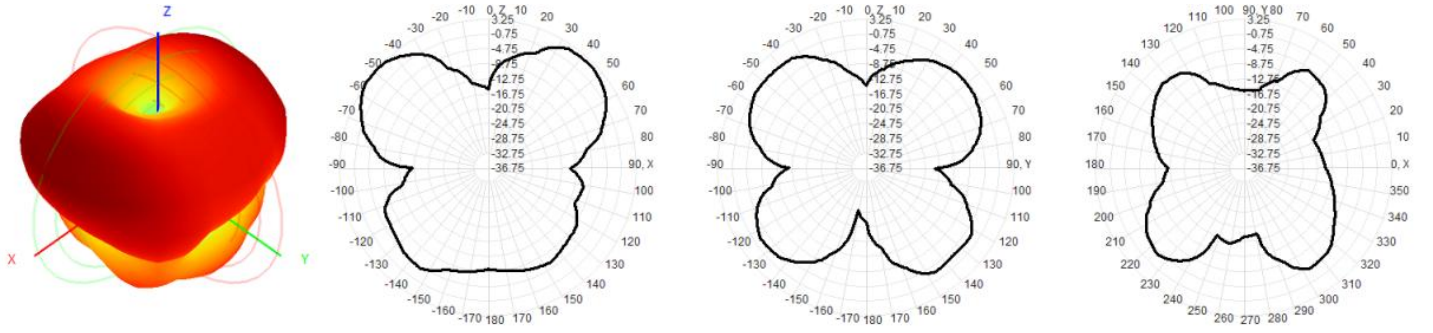
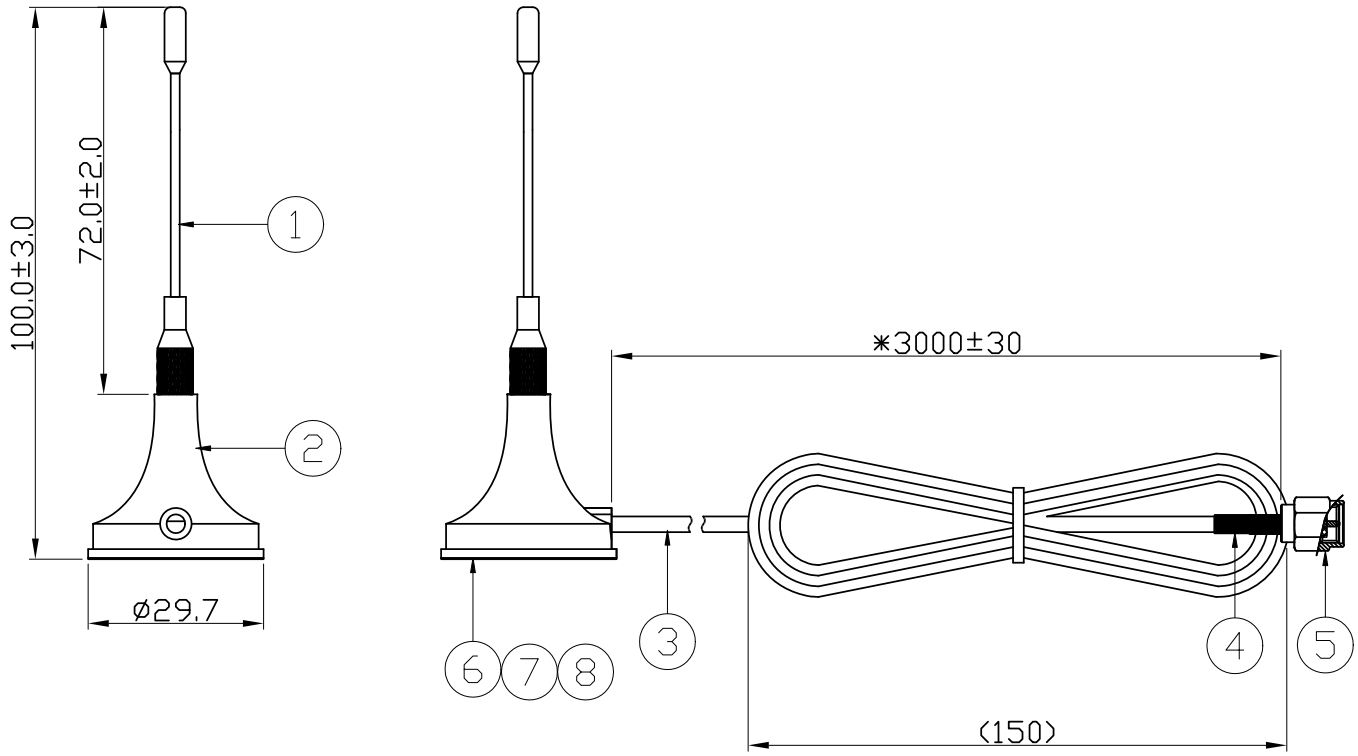
	XZ	YZ	XY
824MHz			
960MHz			
1710MHz			
2170MHz			

5. Mechanical Drawing See attached files

RoHS
Compatible

SIGN	DATE		APPROVER
B			
C			
D			



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

No.	Part Number	Description	Material	Finish	Q'ty
8	TG-AB43-2425	Iron cover	Fe	Ø24*2.5mm	1
7	ASM-CT-1802-2500	Magnet+Iron cover	Fe	Ø18*2.0mm	1
6	BR-29025	vellum	EVA	Black 29.0*0.25	1
5	SMA085-G8MN74-SH	SMA PLUG	Cu	Au plated	1
4	HSTUBE-004N	HST	EVA	L=20mm,Black	1
3	RG-174UL	Cable		Black	1
2	ASM-AB43-02	Stud+base	ABS	Black	1
1	ASM-SP1507255	Spring rod assembly	Steel	Black	1

Tengxiang Technology Inc.

TITLE: Antenna

PART NO.: AB0821-4306SM-3M | DWG NAME:

APP BY	CHE BY	RF BY	DES BY	Tolerance
			SYY 2024.05.17	UNITS: mm SCALE: 1/1 REVISION: A

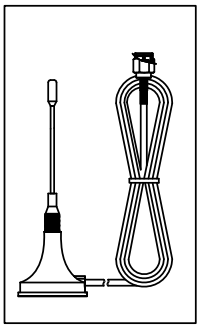
Tolerance: X.X ± 0.3, X.XX ± 0.1, X° ± 1°

產品包裝規範
PACKING CRITERION

Date: 2024.05.17

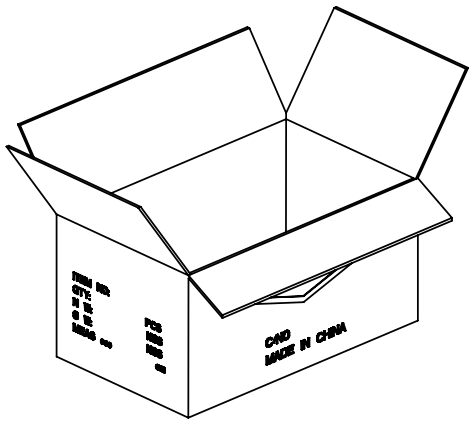
Part Number : AB0821-4306SM-3M	Revision : A
Name: Antenna	Customer : ALL

1 . Enter PE bag。



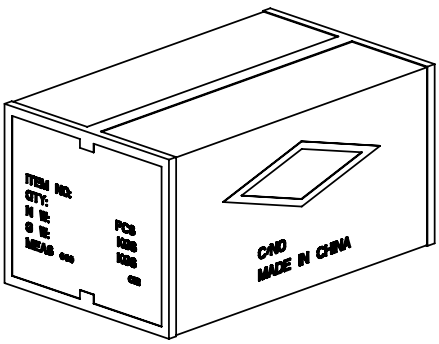
1pcs/ PE bag

2.PACKING。

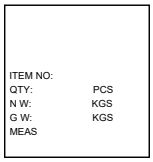


200pcs/Carton

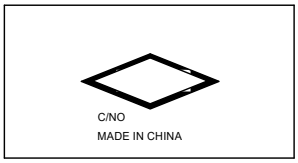
3. SEALING。

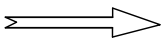


SIDE



FRONT





APPROVED BY: YCX CHECKED BY: HC DESIGNED BY: SYY