Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number:AN2450-09BC07RS-B
Product Name: Antenna

Specification For Approval

Date: 2024.6.18

Version: 1.0

客 户 名 称
Customer：

客 户 料 号
Customer P/N：

腾 祥 料 号
T X P/N： **AN2450-09BC07RS-B**

规 格 描 述
Description : **2.4G/5G 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	祁志鹏	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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http://www.tenxiang.cn

Product Number:AN2450-09BC07RS-B
Product Name: Antenna

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Revision History（变更履历）

Revision	Date	Change Notification	Description
1.0	2024.6.18	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	**<= 2.0 /<= 2.5**
Antenna Gain 增益	**2.69dBi / 2.96 dBi**
Polarization 极化方式	**Linear**
Impedance 阻抗	**50 Ohm**
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	**TPE/ABS/PC+PBT/POM**
Cable Type 线材规格	**RG178**
Connector Type 连接器规格	**RP SMA Plug**
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

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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: 65°C / 12 H; -30°C / 12H RH: ≥ 90%; Time: 24H 温度 65°C 测试 12H 转-30°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:65°C; Time: 24 hours 温度 65° 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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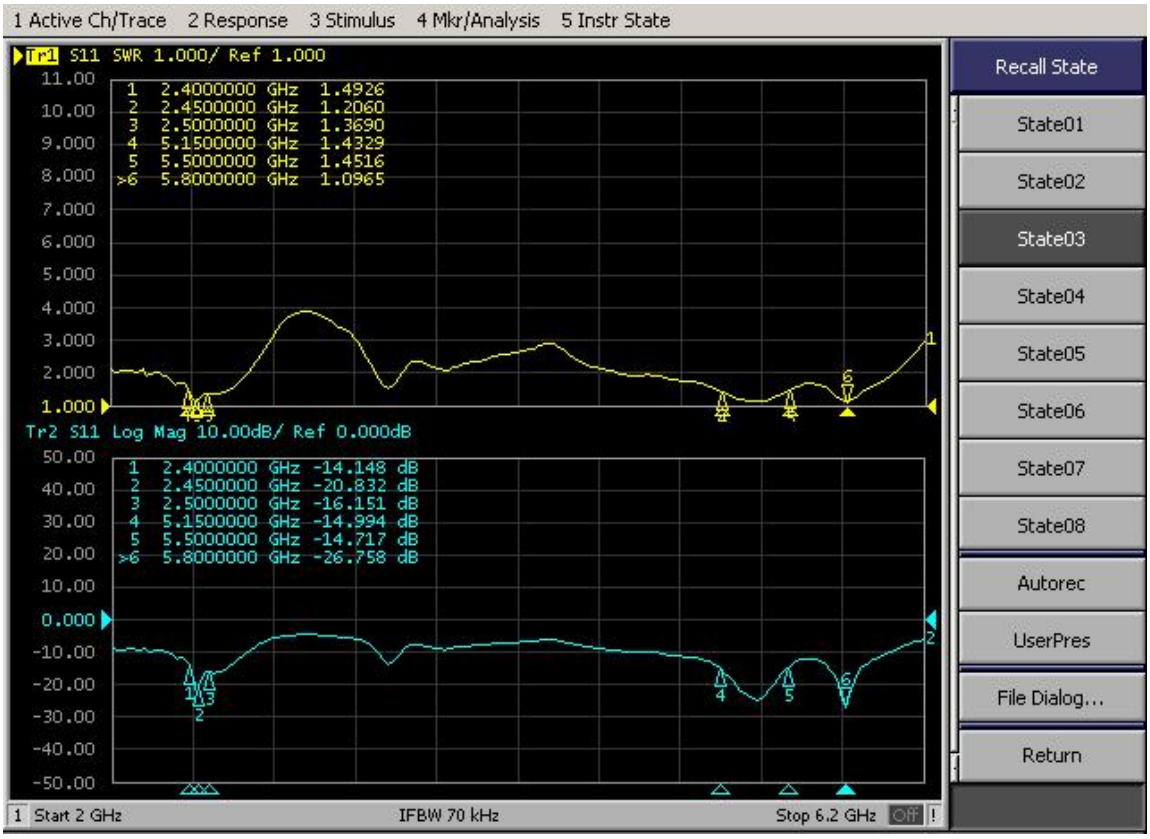
3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5500.0	5850.0
Efficiency (%)	64.70	71.40	65.10	79.60	76.70	68.20
Gain (dBi)	2.52	2.69	2.59	2.96	2.66	2.45

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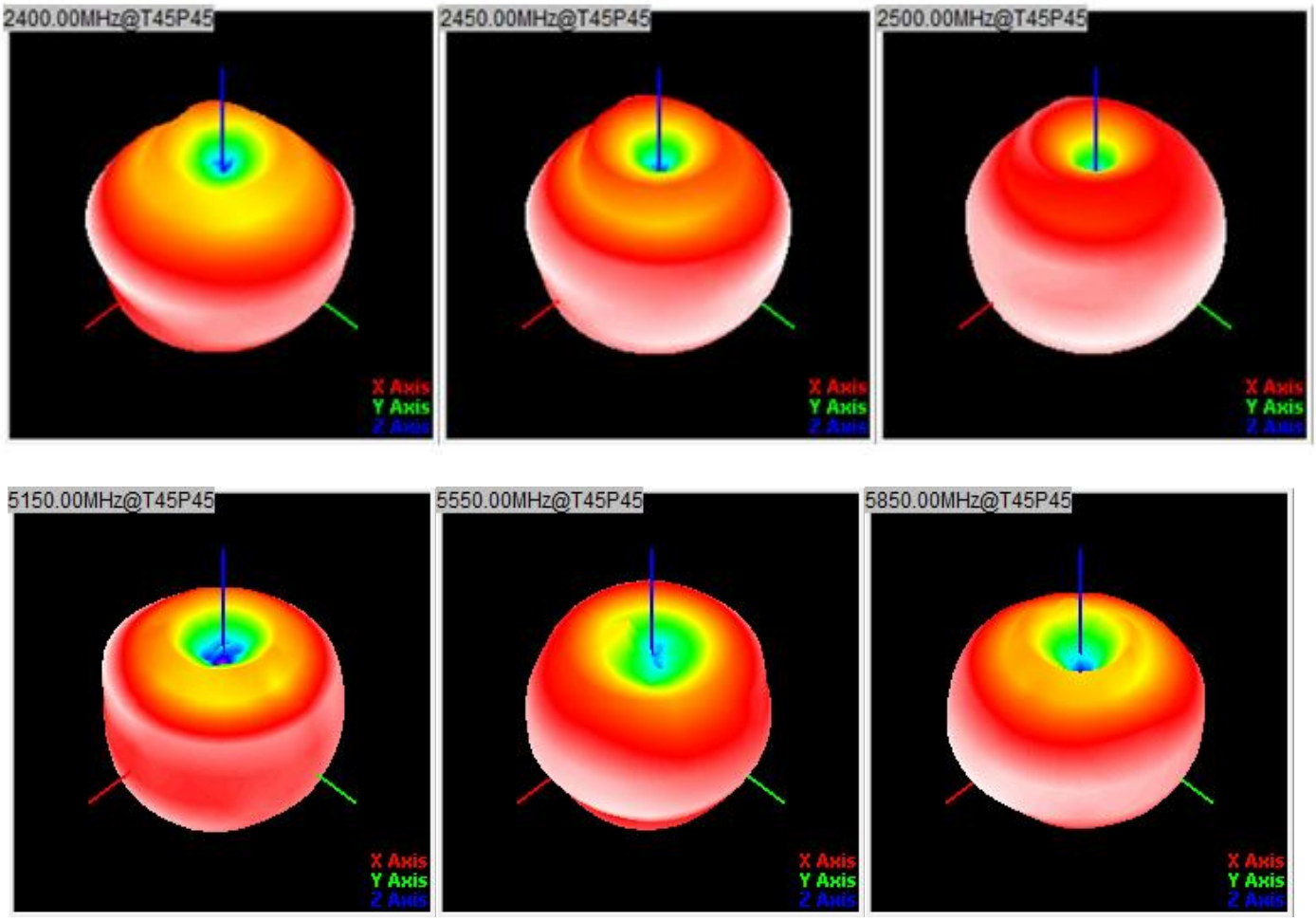
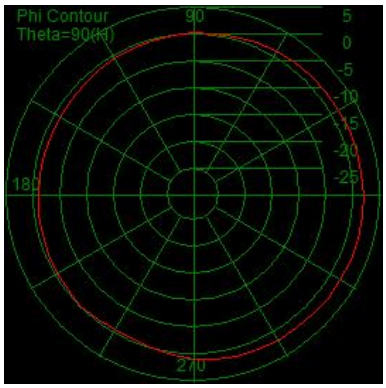
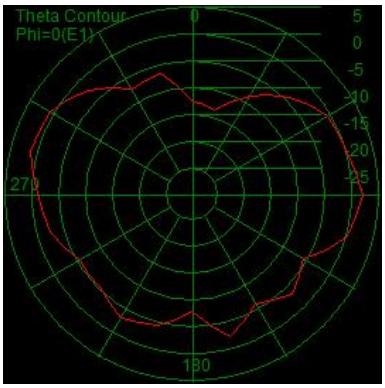
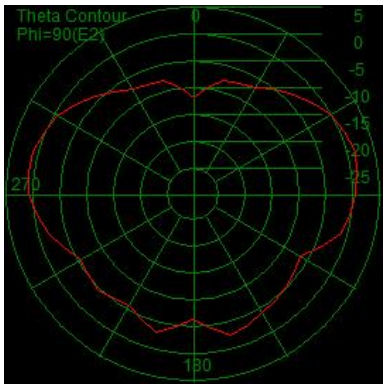


	XY_Plane	XZ_Plane	YZ_Plane
2400MHz			

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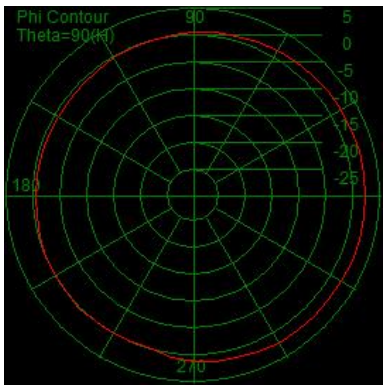
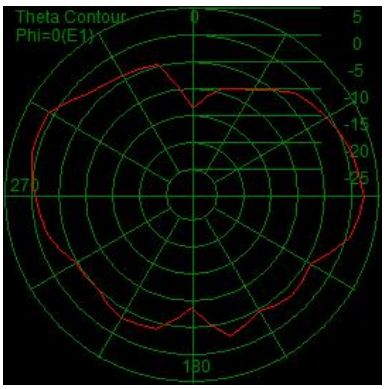
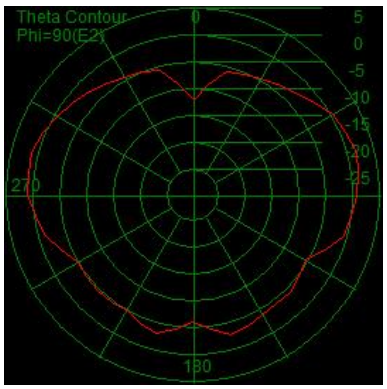
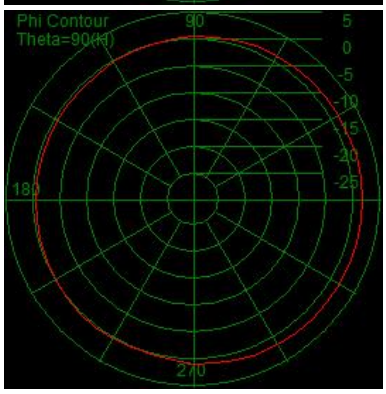
2450MHz

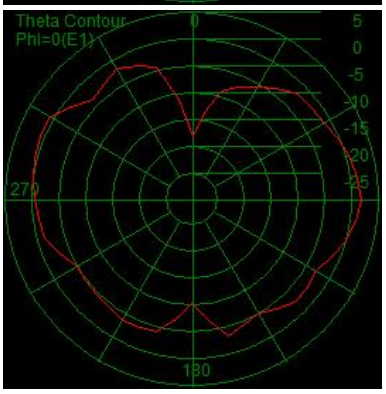


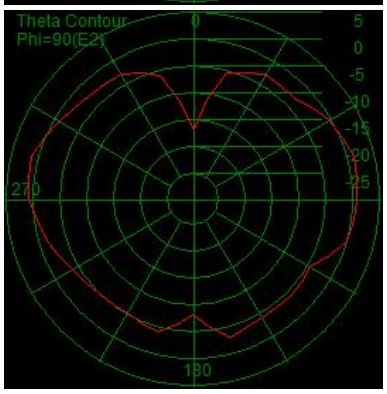




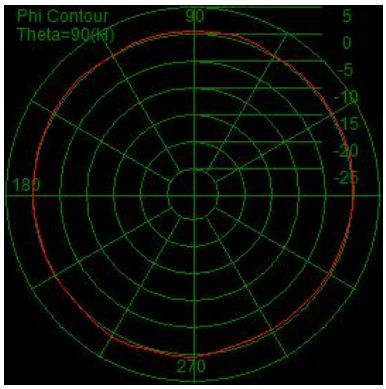
2500MHz

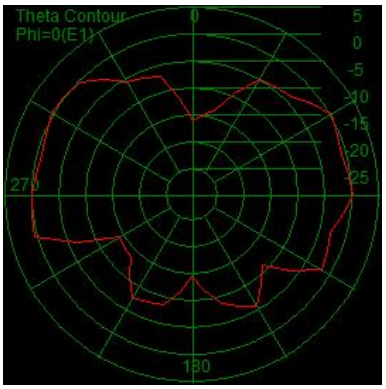


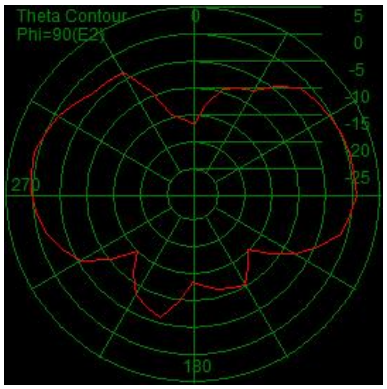




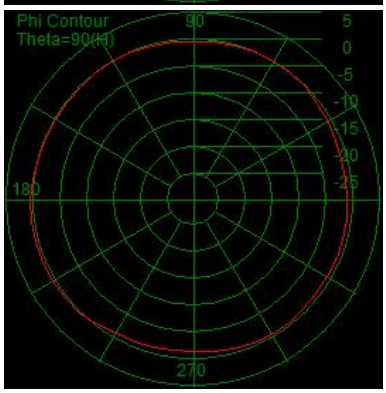
5150MHz

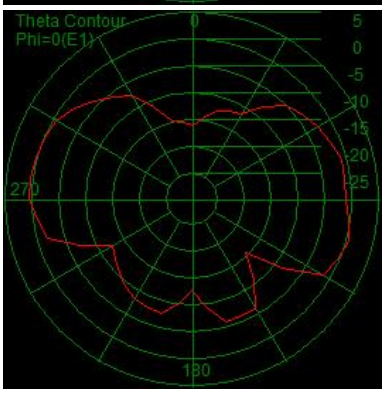


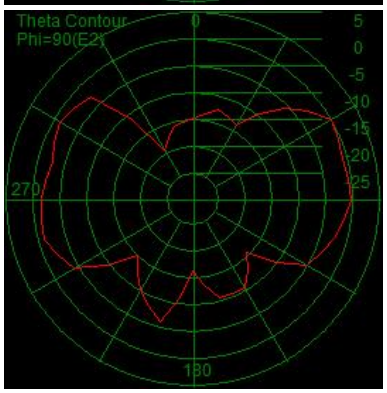




5550MHz







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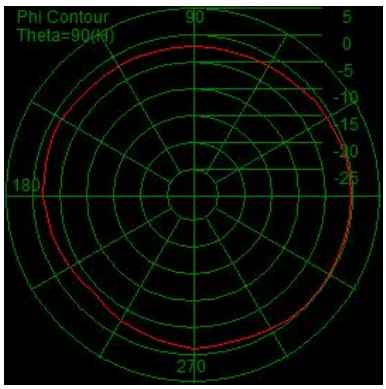
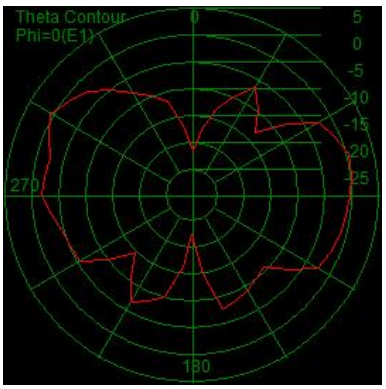
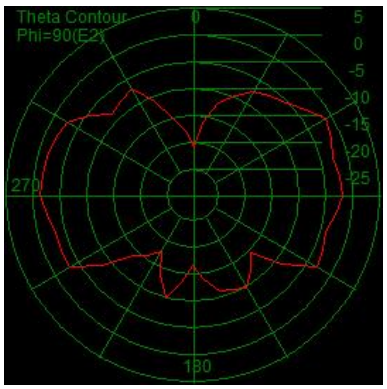
5850MHz



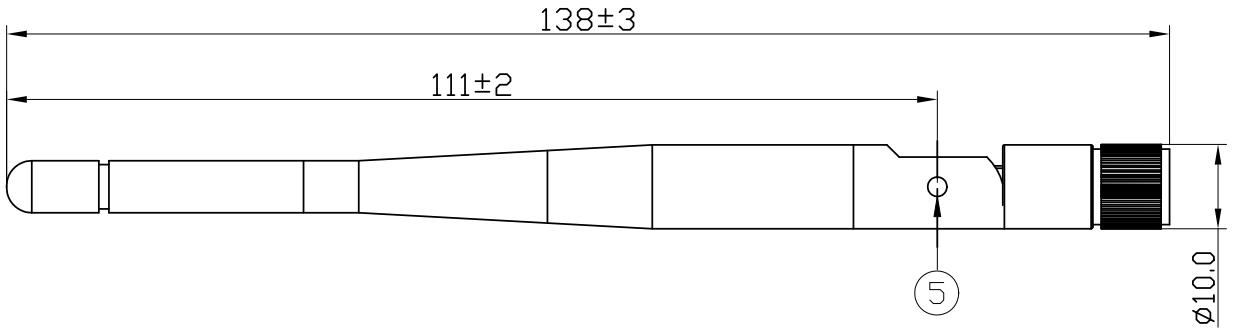


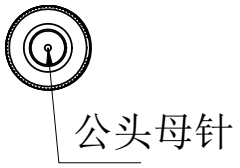


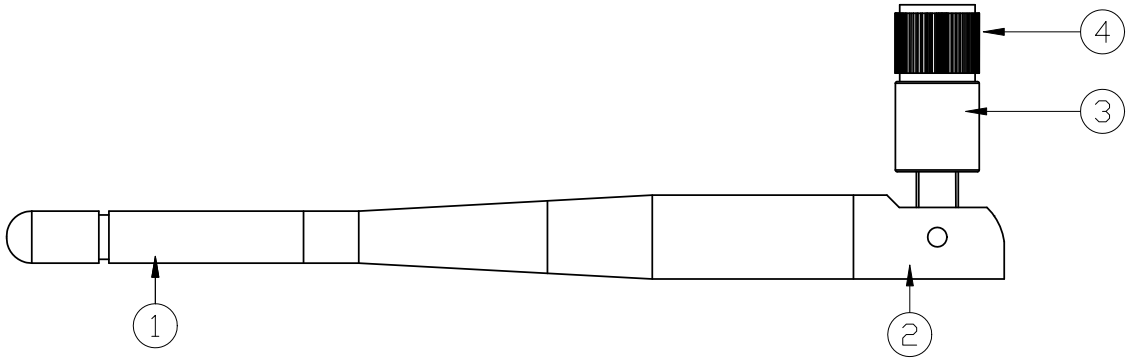
5. Mechanical Drawing See attached files

RoHS Compatible

SIGN	DATE	DESCRIPTION	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	Name	Material	Finish	Q'ty
5	AN01-1215-P-1	PIN	POM	Black	2
4	SMA508-N8MRAN02	RP SMA Plug		Black	1
3	AN0202-01B	Body3	PC+PBT	Black	1
2	AN48-02B-C	Body2	ABS	Black	1
1	AN48-01B	Body1	TPE	Black	1

Tengxiang Technology Inc.

TITLE: 2.4/5GHzAntenna

PART NO.:AN2450-09BC07RS-B DWG NAME:

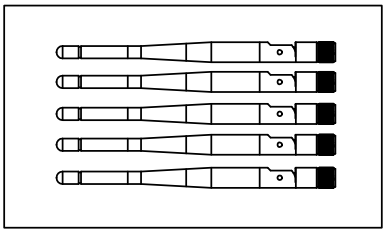
APP BY	CHK BY	RF BY	DES BY		Tolerance
YCX 2024.06.18	HC 2024.06.18	WJ 2024.06.18	dwf 2024.06.18	UNITS: mm SCALE: 1/1 REVISION: A	X.X ±0.5 X.XX ±0.2 X° ±1

產品包裝規範
PACKING CRITERION

Date: 2024.06.18

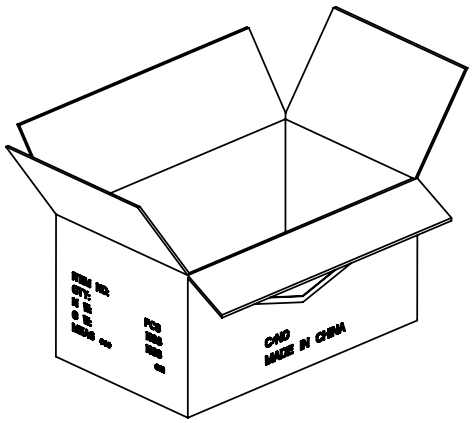
Part Number : AN2450-09BC07RS-B	Revision : A
Name: 2.4/5GHz Antenna	Customer : ALL

1 . Enter PE bag。



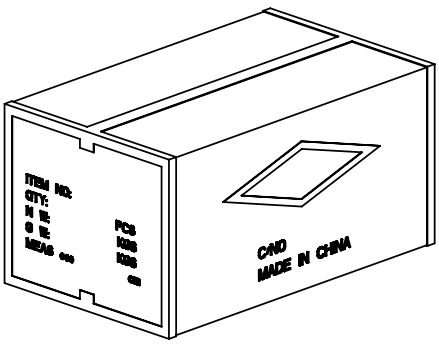
50pcs/ PE bag

2.PACKING。

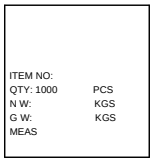


1000pcs/Box

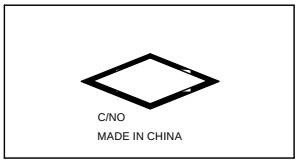
3. SEALING。



SIDE



FRONT



APPROVED BY： YCX　　CHECKED BY： HC　　DESIGNED BY： dwf