



Tengxiang Technology.Inc

东莞市腾祥电子有限公司

Product Number: AN0433-02BC02SM-B

Product Name: Antenna

Specification For Approval

Date: 2026.7.14

Version: 1.0

客户名称

Customer:

HONG KONG RETEKES CO.,LIMITED

客户料号

Customer P/N:

21600073

腾祥料号

T X P/N:

AN0433-02BC02SM-B

规格描述

Description :

433MHz SMA

Tengxiang Checked By: 腾祥审核		Customer Approved By: 客户审核	
DRAWN 制作	郑雪岭	TESTED BY 检测	
CHECKED BY 审核	胡超	CHECKED BY 审核	
Q.C.DEPT. 品管	陈祖喜	Q.C.DEPT. 品管	
APPROVED BY 核准	袁江福	APPROVEDBY 核准	



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<http://www.tenxiang.cn>



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Product Number: AN0433-02BC02SM-B

Product Name: Antenna

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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2026.7.13	初版	

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Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	433 MHz
S.W.R.	≤ 2.0
Antenna Gain	0.36dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Plastic	TPE/ABS/POM
Cable Type	RG178
Connector Type	SMA PLUG
C. Environmental	
Storage Temperature	- 30 °C ~ +65 °C
Operation Temperature	- 30 °C ~ +65 °C

Manufacturer: HONG KONG RETEKESS CO., LIMITED

Address: FLAT/RM 1019B 10/F LIVEN HOUSE NO.61-63 KING YIP STREET KWUN TONG KL

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Product Name: Antenna

2. Characteristics and Reliability Test

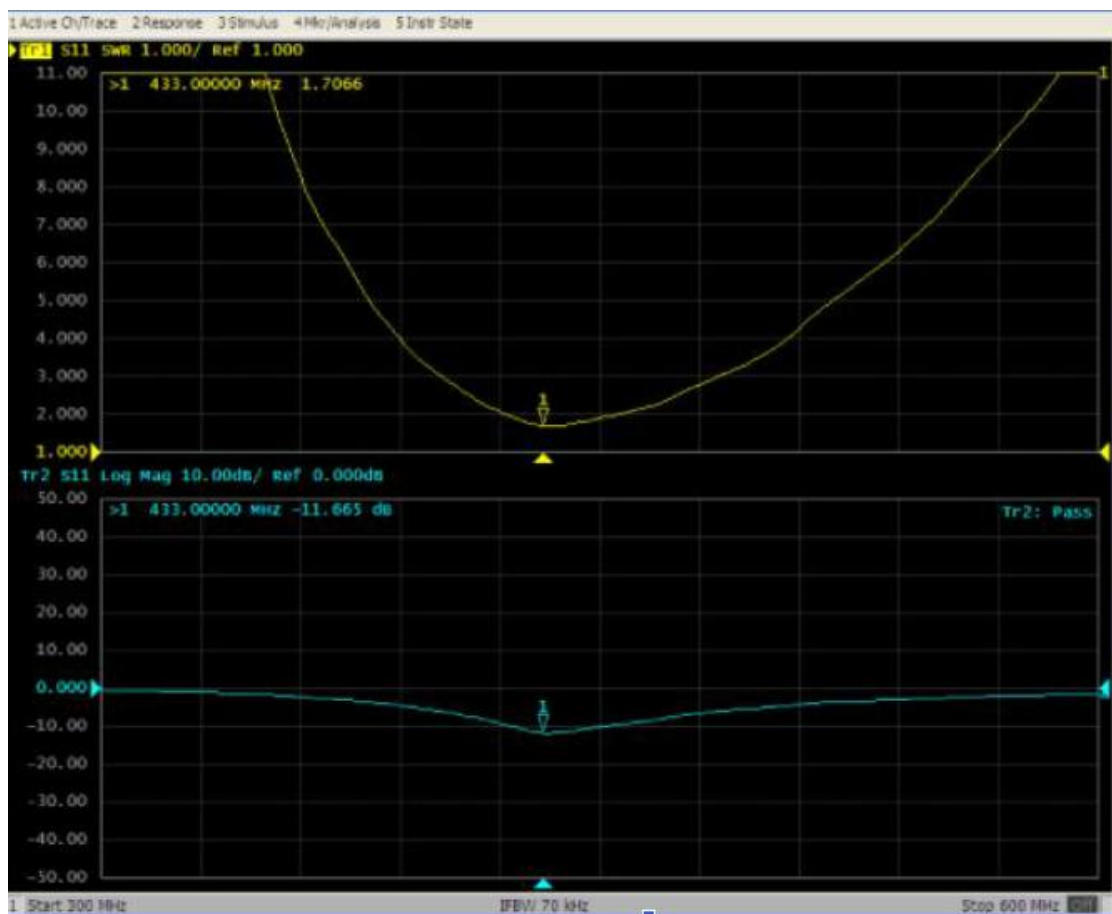
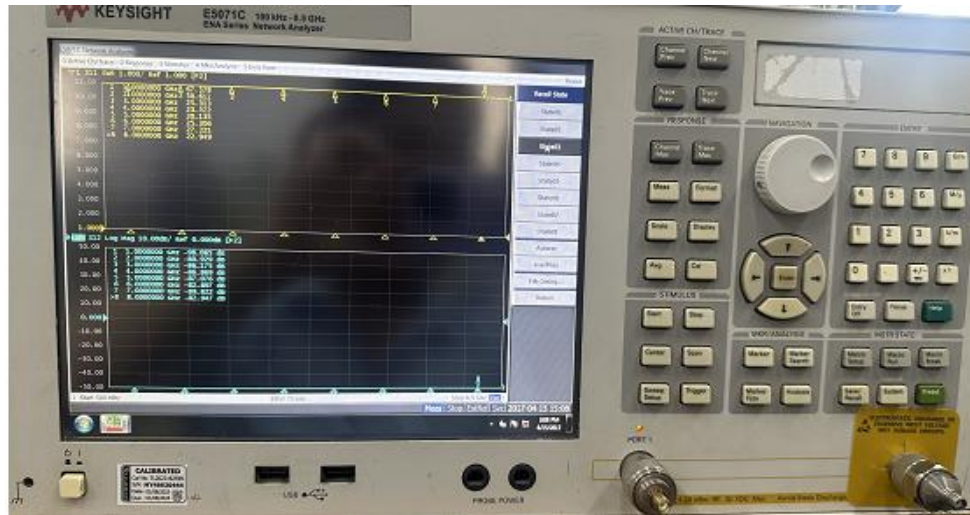
Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置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. $\leq 5\%$ 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

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3. Antenna - S Parameter Test Data

Test Equipment: VSWR was measured using an Agilent E5071C connected to a test fixture, with the device in free-space condition.



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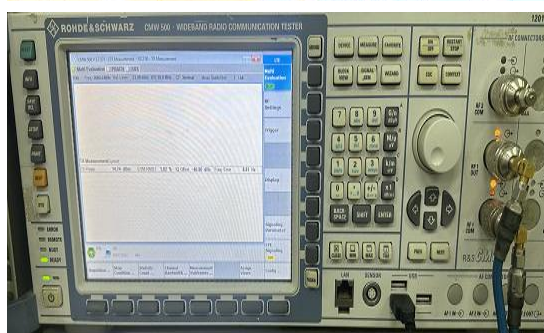
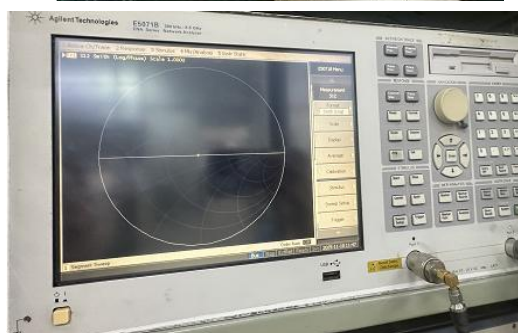
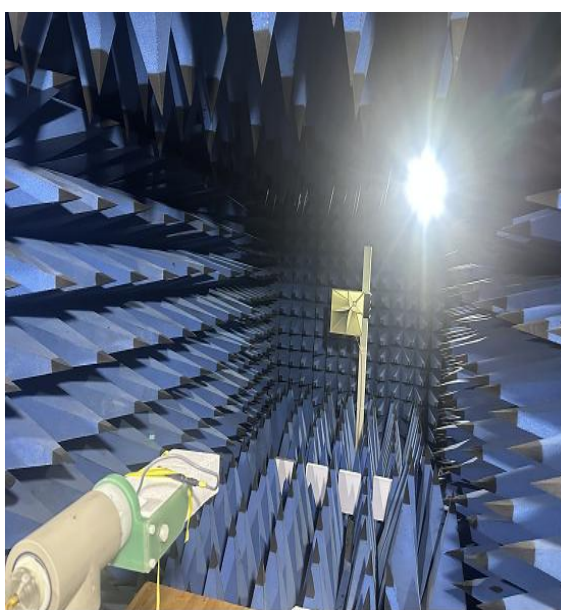
Product Name: Antenna

4. Test environment and equipment

Darkroom Specifications: 6m*6m*6m/7m*3m*3m

LTE-TDD/FDD-SCDMA : ROHDE&SCHWARZ CMW500

Passive efficiency testing equipment:Agilent Technologies E5071B



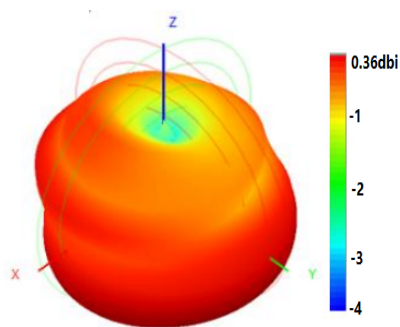
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5. Antenna - Radiation Pattern Test Data

序号	1	2	3	4	5	6	7	8	9
频率(MHz)	430.0	433.0	440.0	445.0	450.0	455.0	460.0	465.0	470.0
增益 (dBi)	0.12	0.36	0.56	0.70	0.33	0.41	0.33	0.19	0.23
效率 (%)	26.22	27.88	26.11	27.22	28.33	25.17	25.77	24.55	23.66

433MHz

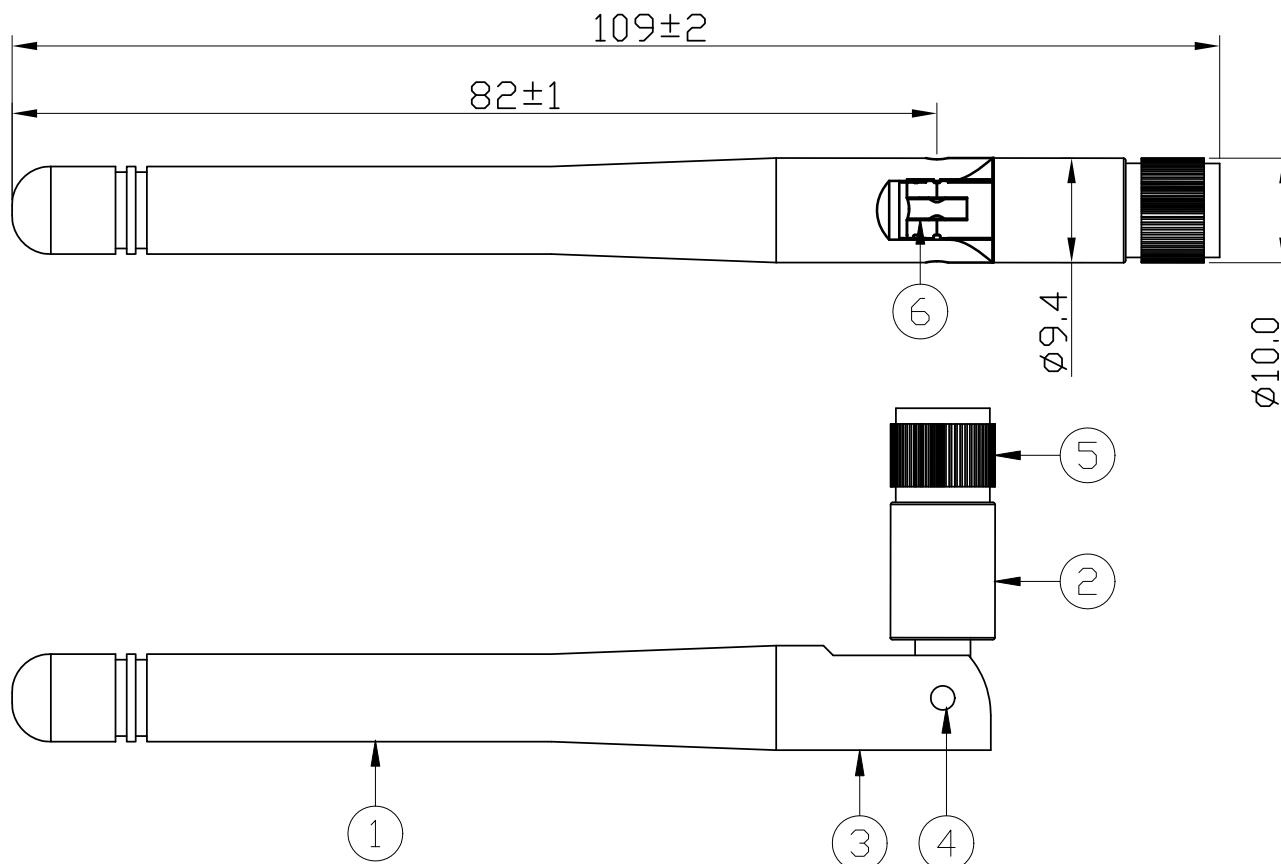


6. Mechanical Drawing See attached files

RoHS

Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



Note:

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

6	RG-178U-04	Cable		Ø1.78mm;Red	1
5	SMA508-N8MNAN02	SMA PLUG		Black	1
4	AN01-1215-P-1	Hinge Pin	POM	Black	2
3	AN58-02B-C	Body 3	ABS	Black	1
2	AN0202-01B	Body 2	ABS	Black	1
1	ANT02-03B-1	Body 1	TPEE	Black	1
No.	Part Number	Name	Material	Finish	Q'ty



Tengxiang Technology Inc.

TITLE: 433.92MHz Antenna

PART NO.: AN0433-02BC02SM-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
2024.03.22	2024.03.22	2024.03.22	2024.03.22	REVISION: A	X.XX ±0.2
					X° ±1

產品包裝規範

PACKING CRITERION

Date: 2024.03.22

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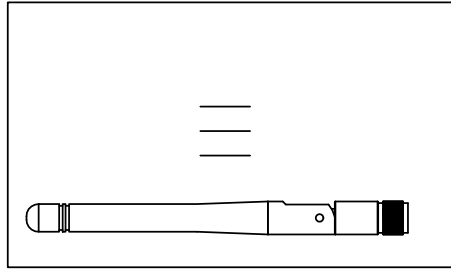
Part Number : AN0433-02BC02SM-B

Revision : A

Name: Antenna

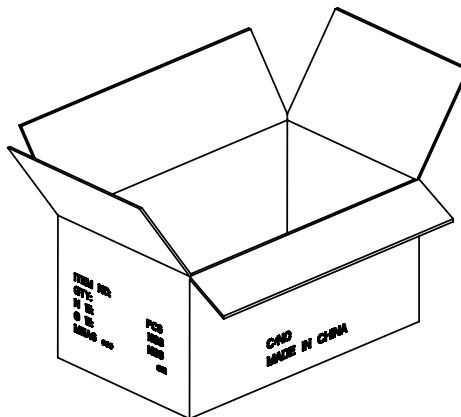
Customer : ALL

1 . Enter PE bag。



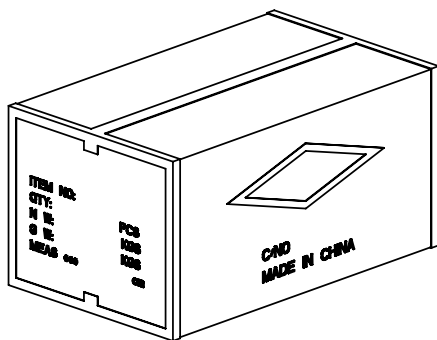
20pcs/ PE bag

2.PACKING 。

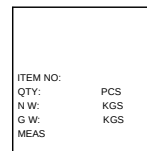


1000pcs/Carton

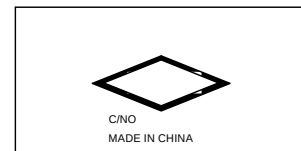
3. SEALING 。



SIDE



FRONT



APPROVED BY : YCX

CHECKED BY : HC

DESIGNED BY : dwf