



Tengxiang Technology.Inc

Product Number: AN2400-33BC01SM

Product Name: Antenna

Specification For Approval

Customer: _____

Customer P/N: _____

Tengxiang P/N: AN2400-33BC01SM

Description : 2.4/5GHz 黑色胶棒天线,RP-SMA antenna
公头母针 (双铜管结构)

Tengxiang Checked By:	Customer Approved By:
工程: DWF 射频: 韦佳 腾祥电子有限公司 工程课	



腾祥电子
TENGXIANG ELECTRONIC

Tengxiang Technology.Inc

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<http://www.tenxiang.cn>

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Product Name: Antenna

1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	2400~2500/5150~5850 MHz
S.W.R.	2400-2500MHz<2.0 ; 5150-5850MHz <2.5
Antenna Gain	3.0dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	ABS,POM,CU
Cable Type	RG178
Connector Type	公头母针
C. Environmental	
Operation Temperature	- 30 °C ~ + 65 °C
Storage Temperature	- 30 °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
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification

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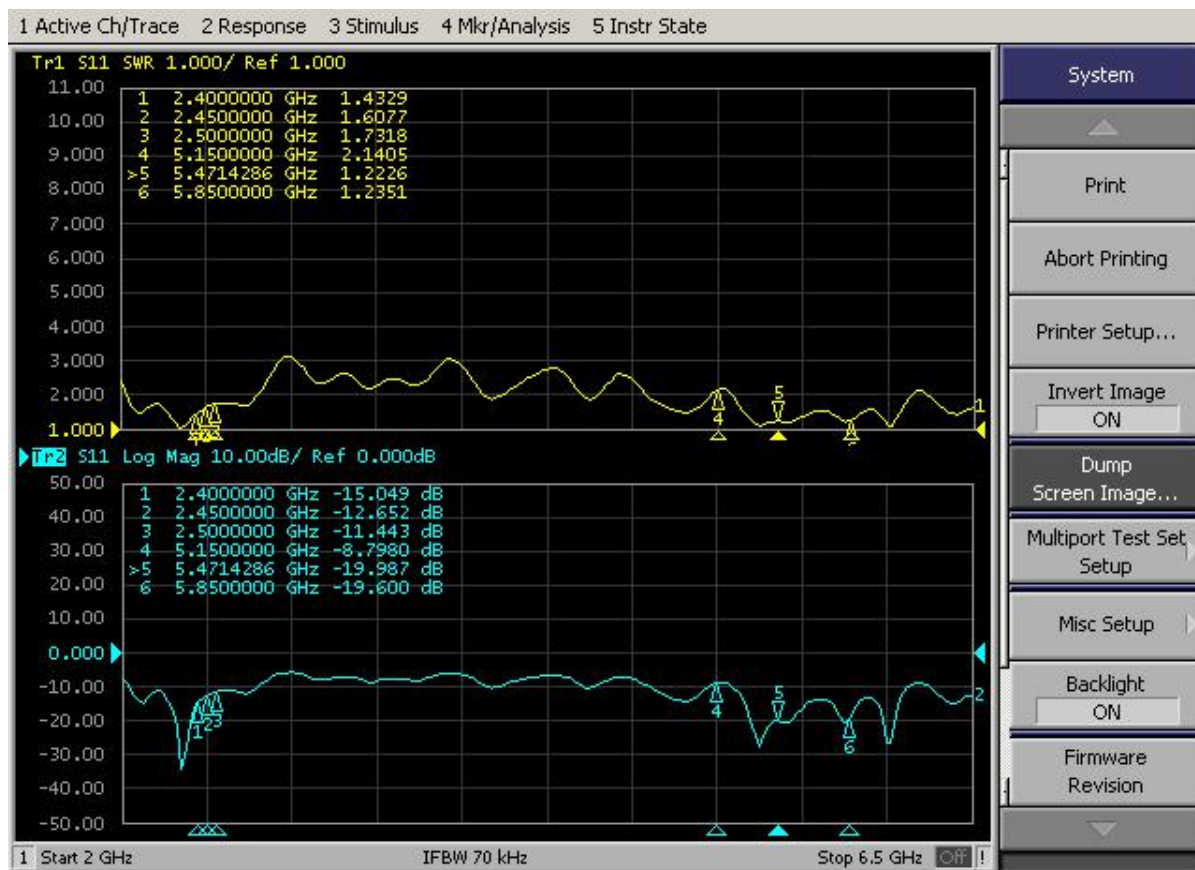
Product Name: Antenna

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: 40°C; RH: >= 95%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	1 Cycle: - 30°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: 85°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 EU 2015/863

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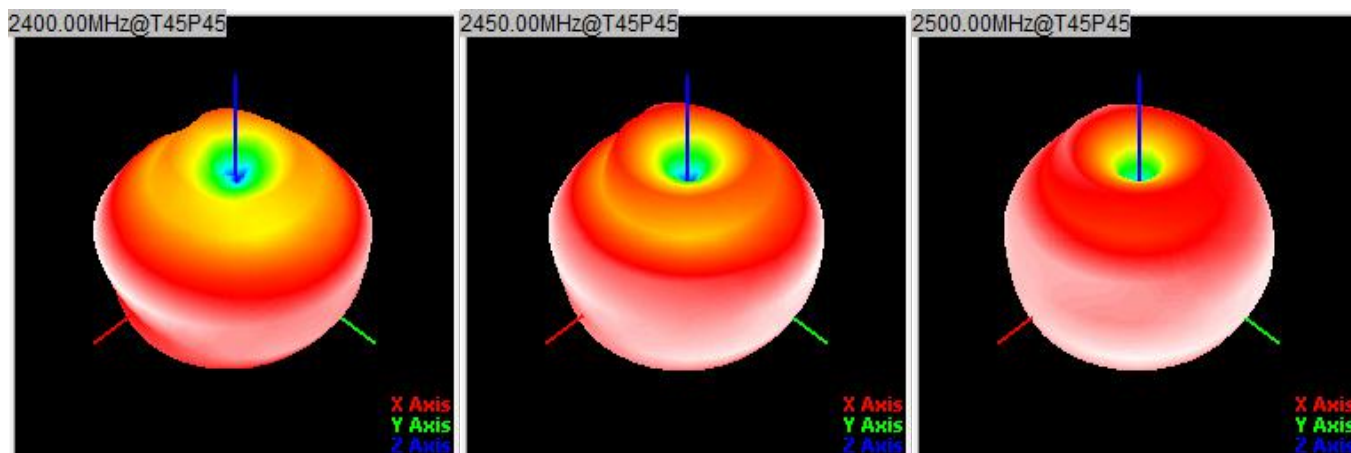
Product Name: Antenna

3. Antenna - S Parameter Test Data



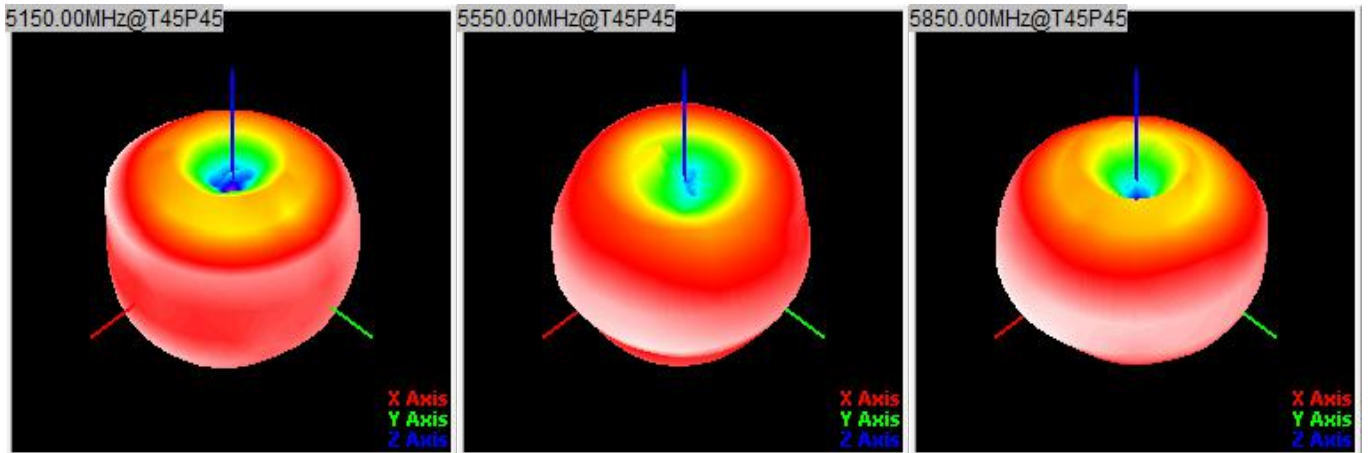
4. Antenna - Radiation Pattern Test Data

Frequency (MHz)	2400.0	2450.0	2500.0	5150.0	5550.0	5850.0
Efficiency (%)	72.10	74.90	73.50	65.30	53.80	62.80
Gain (dBi)	2.85	1.90	1.63	1.20	1.55	3.02

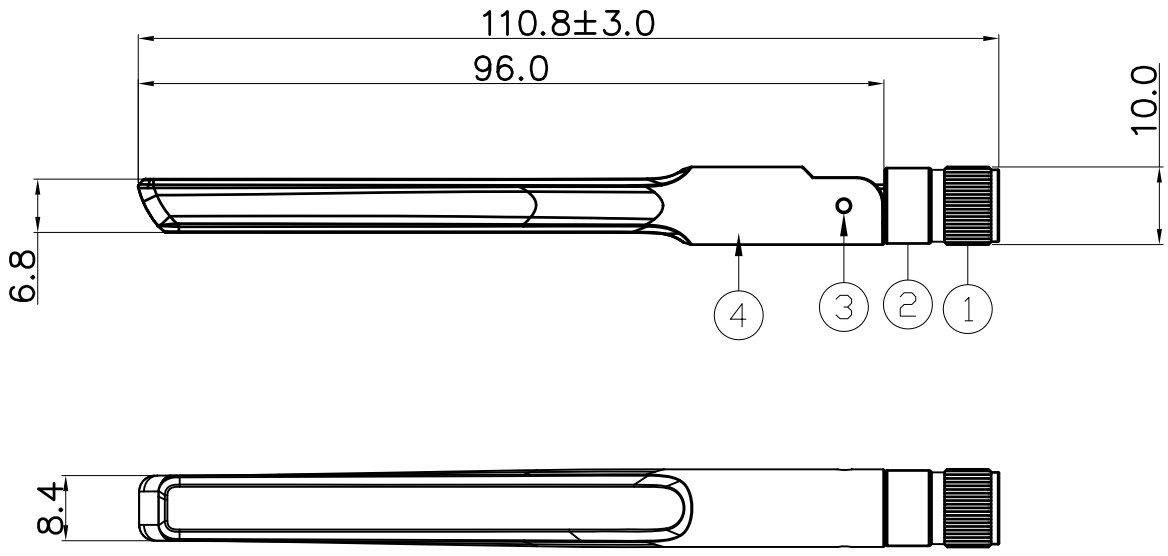


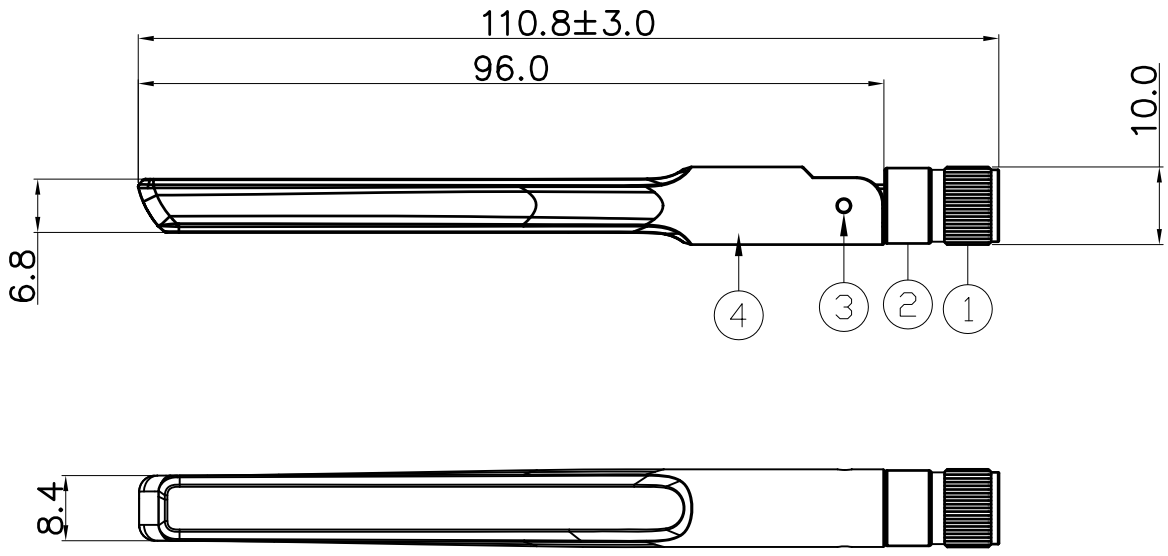
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5. Mechanical Drawing (See attached files)

1	2	3	4	5	6	7	8																														
HF☐ RoHS☒ REACH☐ CONFIDENTIAL					<table><tr><td>SIGN</td><td>DATE</td><td>DESCRIPTION</td><td>APPROVER</td></tr><tr><td>△</td><td></td><td></td><td></td></tr><tr><td>△</td><td></td><td></td><td></td></tr><tr><td>△</td><td></td><td></td><td></td></tr></table>			SIGN	DATE	DESCRIPTION	APPROVER	△				△				△																	
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Note: 1.Mark * is important dimension;"Cpk "Identify for process control(CpK≥1.33). 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.																																					
<table><tr><td>4</td><td>AN33-01B</td><td>本体</td><td>ABS</td><td>Black</td><td>1</td></tr><tr><td>3</td><td>AN01-1215-P-1</td><td>铆钉</td><td>POM</td><td>Black</td><td>2</td></tr><tr><td>2</td><td>AN33-02B</td><td>连接头</td><td>ABS</td><td>Black</td><td>1</td></tr><tr><td>1</td><td>SMA508-N8MNAN02</td><td>SMA PIUG</td><td>Cu+POM</td><td>Black</td><td>1</td></tr><tr><td>No.</td><td>Part Number</td><td>Name</td><td>Material</td><td>Finish</td><td>Q'ty</td></tr></table>								4	AN33-01B	本体	ABS	Black	1	3	AN01-1215-P-1	铆钉	POM	Black	2	2	AN33-02B	连接头	ABS	Black	1	1	SMA508-N8MNAN02	SMA PIUG	Cu+POM	Black	1	No.	Part Number	Name	Material	Finish	Q'ty
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Tengxiang Electronics Co., Ltd. <table><tr><td colspan="4">TITLE: 2.4/5G 3dBi Antenna</td></tr><tr><td colspan="2">PART NO.: AN2450-33BC01SM</td><td colspan="2">CUSTOMER P/N: /</td></tr><tr><td>APP BY</td><td>CHK BY</td><td>RF BY</td><td>DES BY</td></tr><tr><td></td><td></td><td></td><td>HC 2021.10.28</td></tr><tr><td colspan="3">UNITS: mm SCALE: 1/1 REVISION: A</td><td>Tolerance X.X ±0.5 X.XX ±0.2 X° ±1</td></tr></table>								TITLE: 2.4/5G 3dBi Antenna				PART NO.: AN2450-33BC01SM		CUSTOMER P/N: /		APP BY	CHK BY	RF BY	DES BY				HC 2021.10.28	UNITS: mm SCALE: 1/1 REVISION: A			Tolerance X.X ±0.5 X.XX ±0.2 X° ±1										
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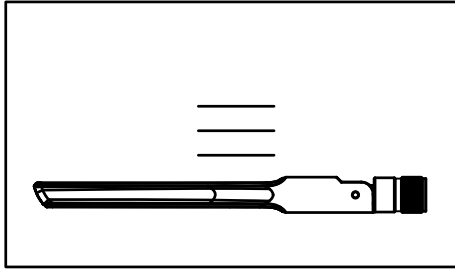
產品包裝規範

PACKING CRITERION

Date: 2021.10.28

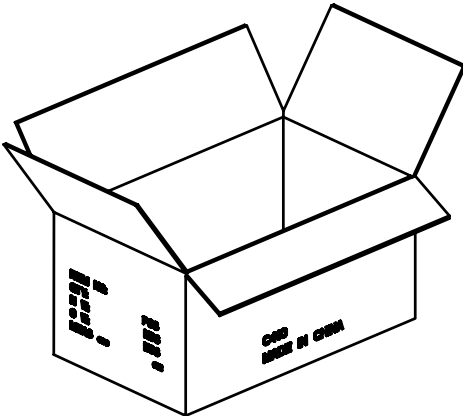
Part Number : AN2450-33BC01SM	Revision : A
Name: Antenna	

1 . Enter PE bag。



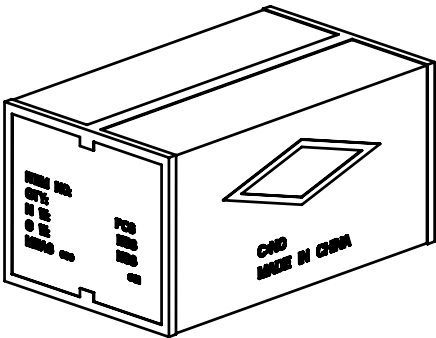
20pcs/ PE bag

2.PACKING 。



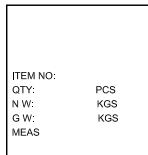
1000pcs/Carton

3. SEALING。

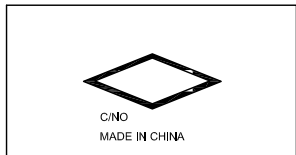


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SIDE



FRONT



APPROVED BY : YCX CHECKED BY : TOM DESIGNED BY : HC