

Product Number: AN5000-50F120BX-W12

Product Name: Antenna

1. Specification

Sample Photo



A. Electrical Characteristics

Frequency	5150-5850 MHz
S.W.R.	<= 2.0
Antenna Gain	5dBi
Polarization	Linear
Impedance	50 Ohm

B. Material & Mechanical Characteristics

Material of Radiator	CS
Material of Plastic	TPE /ABS/PC+PBT
Cable Type	1.13mm Black
Connector Type	IPEX

C. Environmental

Operation Temperature	- 25 °C ~ + 65 °C
Storage Temperature	- 25 °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

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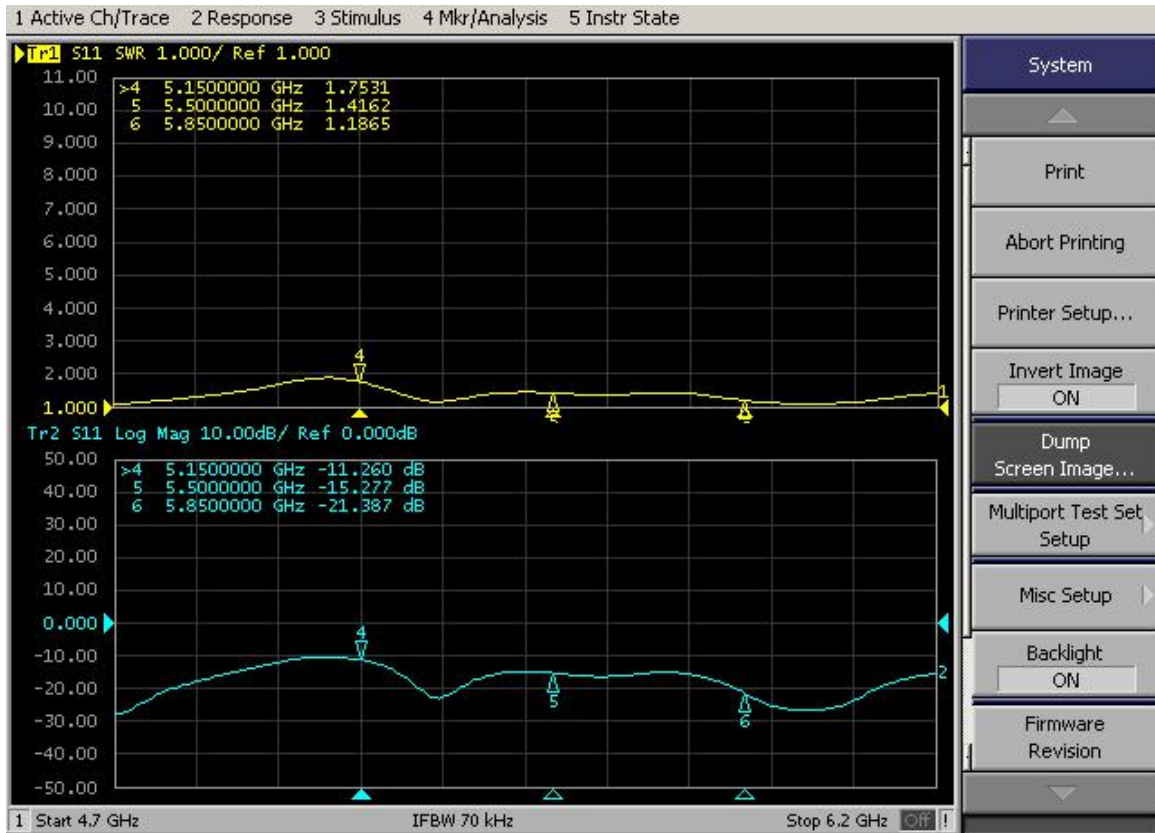
Product Name: Antenna

C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
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: - 25°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 2015/95/EC

3. Antenna - S Parameter Test Data

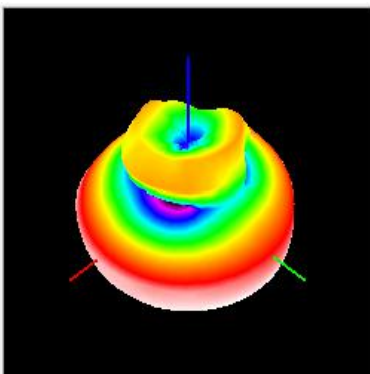
Product Number: AN5000-50F120BX-W12

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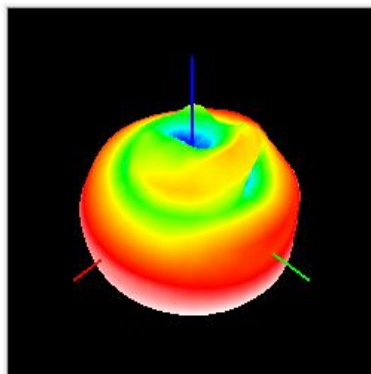
4. Antenna - Radiation Pattern Test Data

Frequency (MHz)	5150	5500	5850
Efficiency (%)	57.1	66.8	61.1
Gain (dBi)	5.00	5.00	5.00



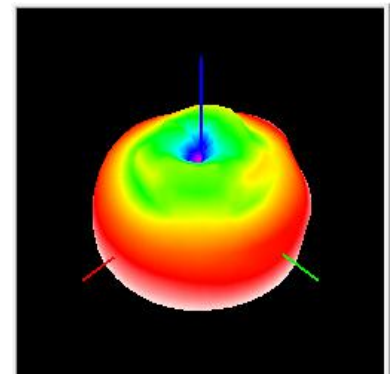
5150

XY_Plane



5500

XZ_Plane



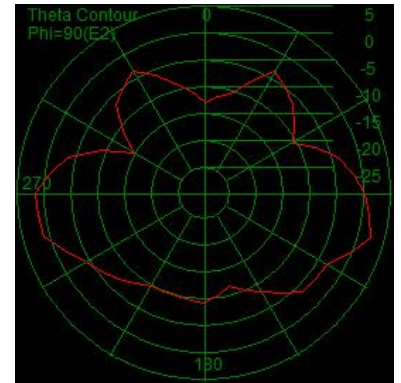
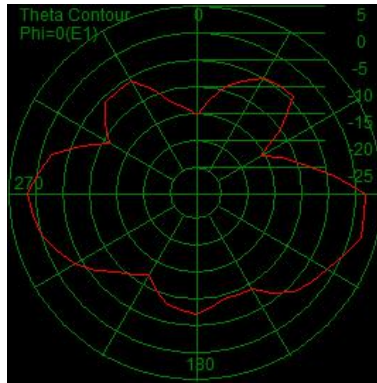
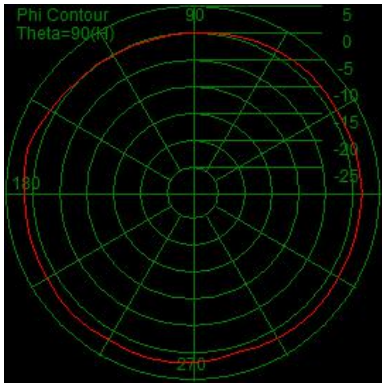
5850

YZ_Plane

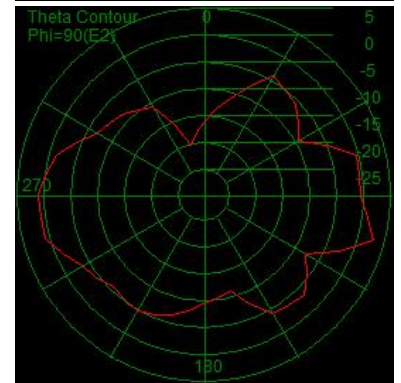
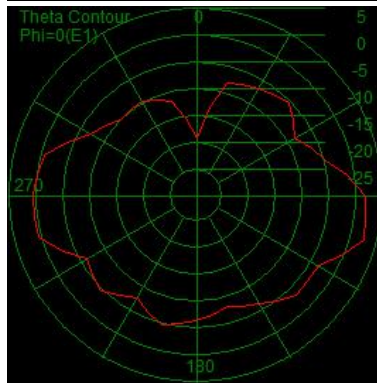
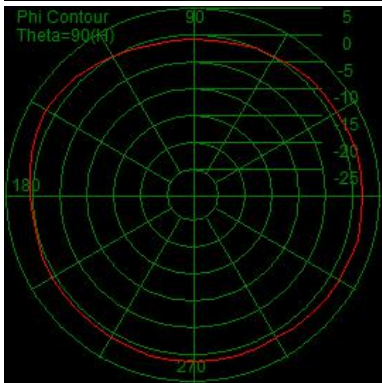
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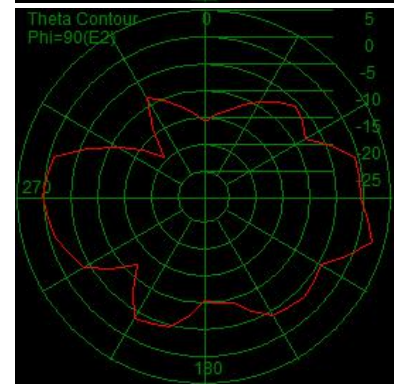
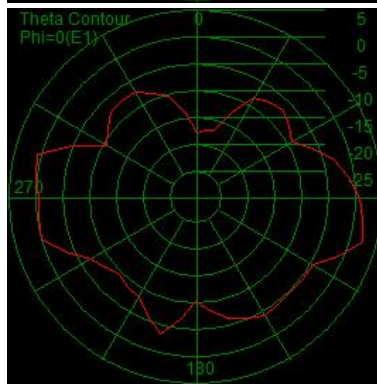
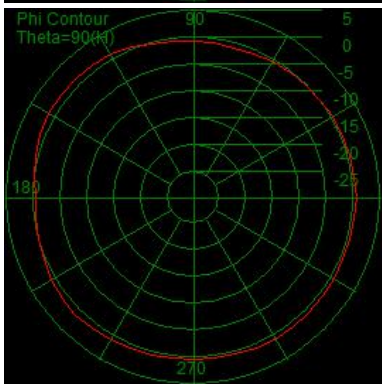
5150MHz



5500MHz



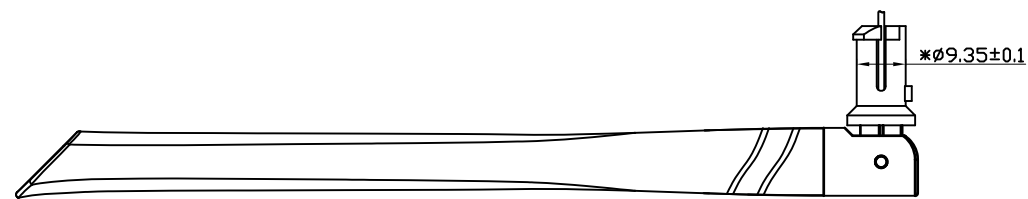
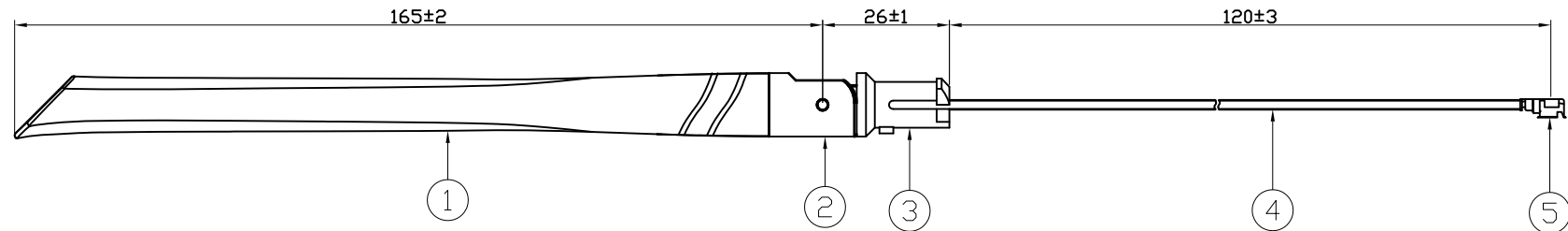
5850MHz



5. Mechanical Drawing (See attached files)

HF
 RoHS
 REACH
CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



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

5	CR-113-ZP-A	I-PEX	Cu	Au Plating	1
4	CB-113BS	Cable		Black	1
3	AN9201-09W6	Body 3	PC+PBT	White	1
2	AN9201-06W6	Body 2	ABS	White	1
1	BODY-AN50-01W6	Body 1	TPE	White	1
No.	Part Number	Name	Material	Finish	Q'ty

TITLE: 5GHz Antenna						
PART NO.: AN5000-50F120BX-W12				DWG NAME:		
APP BY	CHK BY	RF BY	DES BY		Tolerance	
YCX	dwf	WJ	dwf		UNITS: mm	X.X ±0.5
2022.03.18	2022.03.18	2022.03.18	2022.03.18	SCALE: 1/1	X.XX ±0.2	
					REVISION: A	X° ±1°

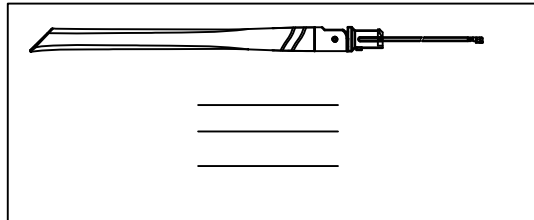
PACKING CRITERION

Date: 2022.03.18

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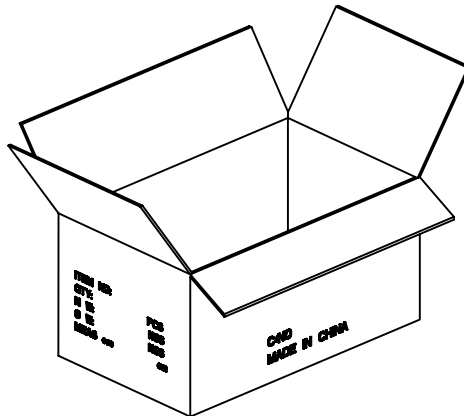
Part Number : AN5000-50F120BX-W12	Revision : A
Name: 5.0GHz Antenna	Customer : ALL

1 . Enter PE bag.



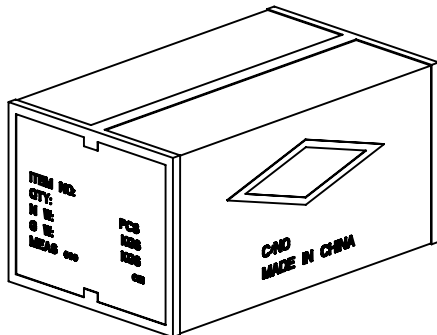
50pcs/ PE bag

2.PACKING ◦

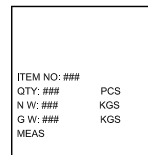


1000pcs/Carton

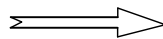
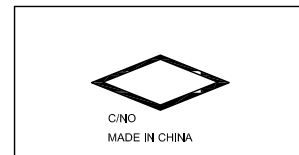
3. SEALING ◦



SIDE



FRONT



APPROVED BY : YTX

CHECKED BY : HC

DESIGNED BY : dwf