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Product Number: AN2450-9214SM

Product Name: Antenna



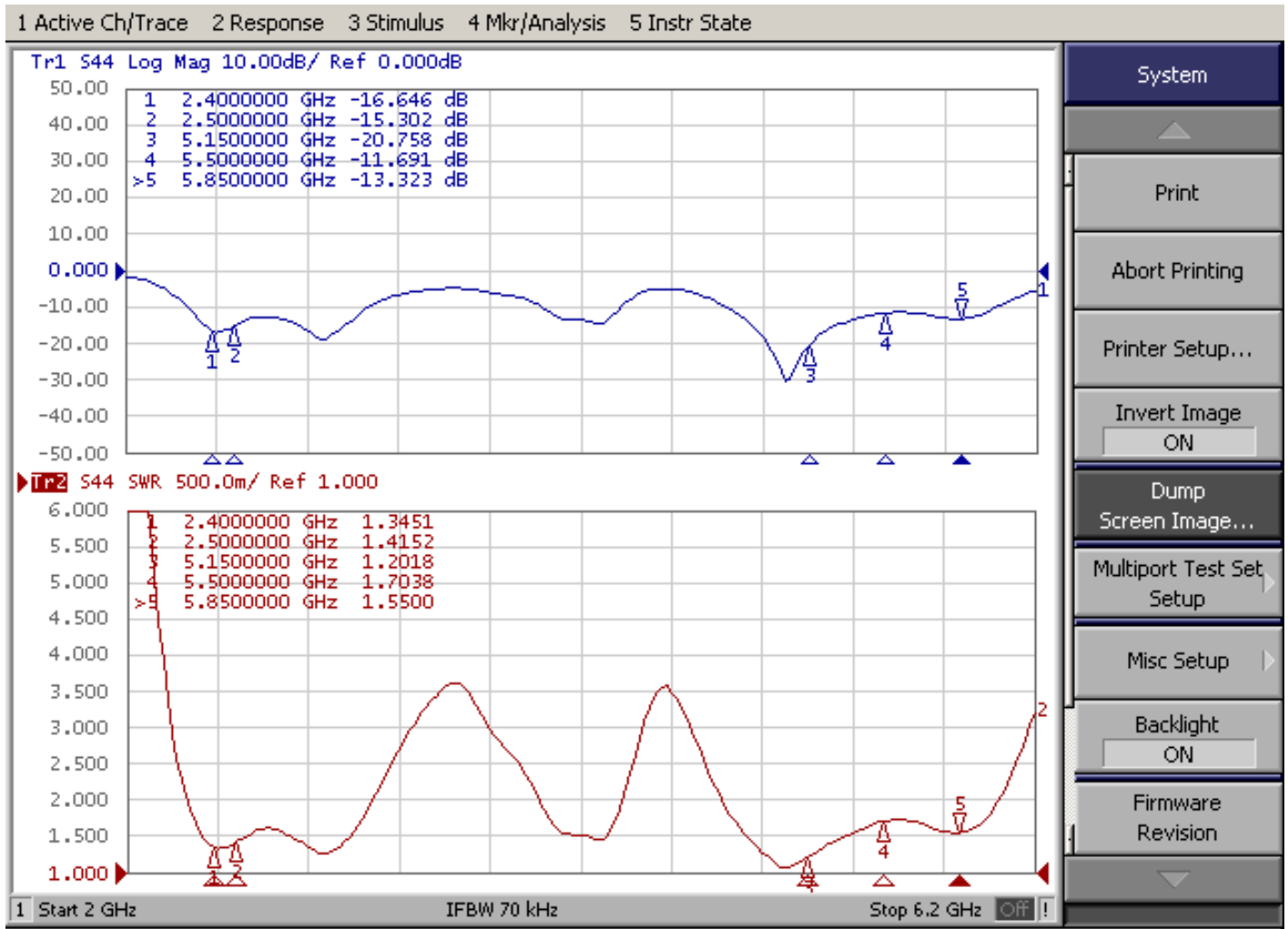
## 1. Specification

Sample Photo	
 A photograph of a black, elongated, tapered antenna component, likely made of copper, with a SMA male connector at one end. The antenna is shown against a plain white background.	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz 5150 ~ 5850 MHz
S.W.R.	$\leq 2.0$ @ 2400 ~ 2500 MHz $\leq 2.0$ @ 5150 ~ 5850 MHz
Antenna Gain	$4.0 \pm 0.7\text{dBi}$ @ 2400 ~ 2500 MHz $4.0 \pm 0.7\text{dBi}$ @ 5150 ~ 5850 MHz
Radiation Pattern	Omni-Directional
Max Input Power	$\geq 2$ W
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	CU
Material of Plastic	Body: TPEE Hinge: ABS Holder: ABS
Cable Type	RG-178
Connector Type	SMA Male
Connector Pull Test	$\geq 5$ Kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

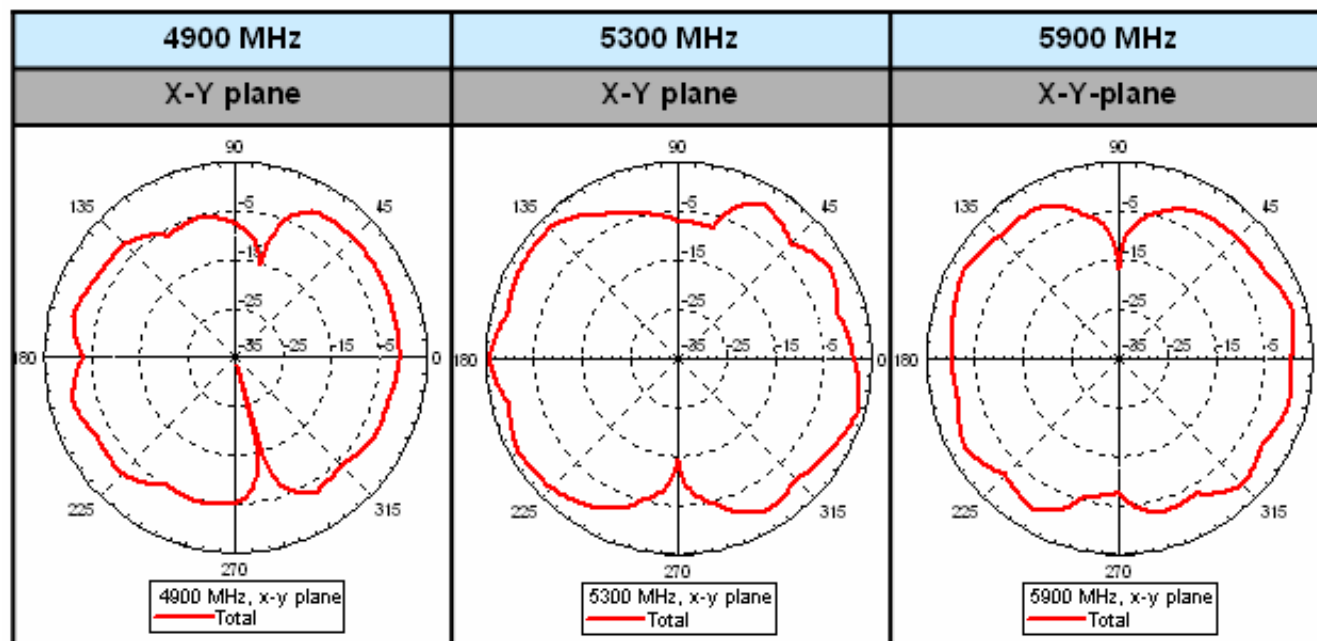
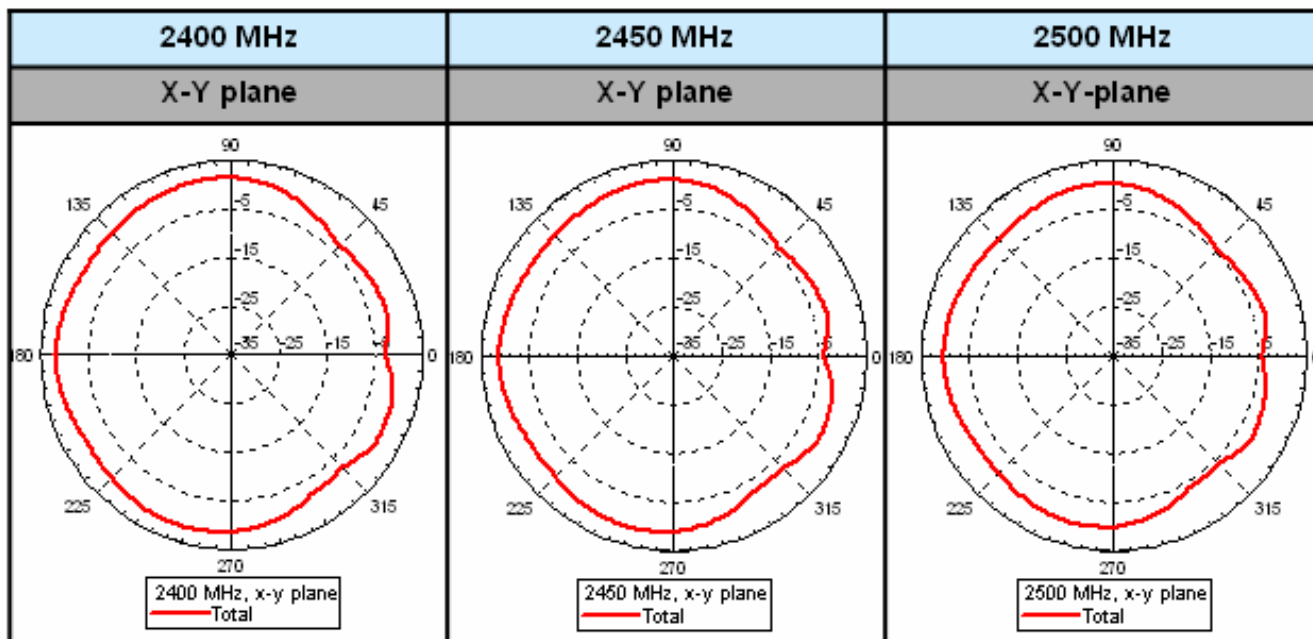
## 2. Characteristics and Reliability Test

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
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	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	GB / T 2423 . 17- 93 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	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°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 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

### 3. Antenna - S Parameter Test Data



### 4. Antenna - Radiation Pattern Test Data



5. Mechanical Drawing  
See attached files

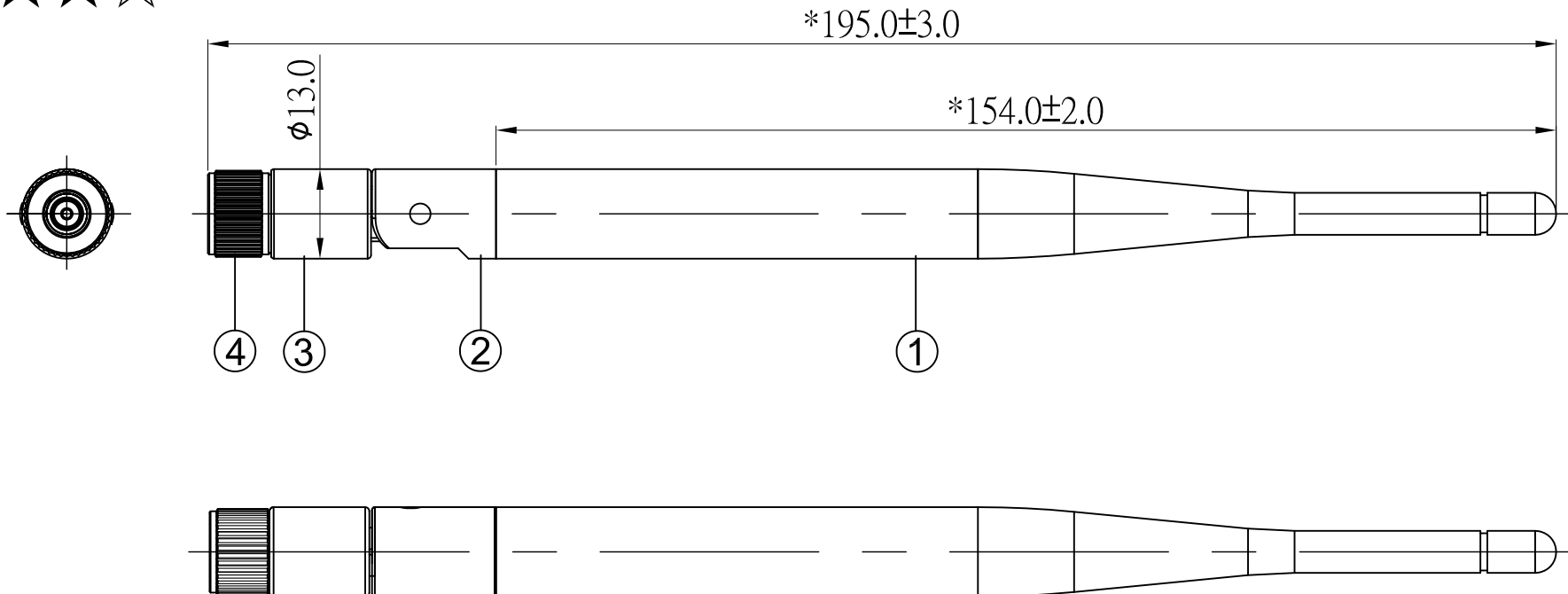
6. Material Description and RoHS Test Report  
See attached files

# RoHS

## Compatible



SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



Note:

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

4	SMA207-CCT5AN92-A	SMA公頭公針	銅	電著	1
3	AN0304-T07B	連接頭	ABS	黑色	1
2	AN9201-07B	連接筒	ABS	黑色	1
1	AN9201-04B	天線塑膠外套	TPEE	黑色	1
No.	Part Number	Description	Material	Finished	Q'ty

Invax System Group.

### Cortec

Cortec Technology Inc.

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TITLE: 2.4~2.5 4.9~5.9GHz Antenna					
PART NO.: AN2450-9214SM			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY	 UNITS: mm SCALE: 1/1 REVISION: A	Tolerance
Grant 2012.06.19	Liukui 2012.06.19		王福彬 2012.06.19		X.X ±0.3 X.XX ±0.2 X° ±1