

Index:

- 1. Revision History / Page 3**
- 2. Specification / Page 4**
- 3. Characteristics and Reliability Test / Page 5**
- 4. Antenna - S Parameter Test Data / Page 6**
- 5. Antenna - Radiation Pattern Test Data / Page 7 ~ 8**
- 6. Mechanical and Packing Drawing / Page 9 ~ 10**
- 7. Material Description and RoHS Test Report / Page 11 ~ end**

Product Number: AN0915-13A09BTM

Product Name: Antenna



2. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency	870 ~ 960 MHz
V.S.W.R.	≤ 2.0 @ 915 MHz
Peak Gain	1.5 dBi
Polarization	Linear
Impedance	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Material of Plastic	ABS / TPEE
Cable Type	RG-178U-03
Connector Type	TNC Male
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C
Antenna Color Storage life	< 2 year

Product Number: AN0915-13A09BTM

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3. Characteristics and Reliability Test

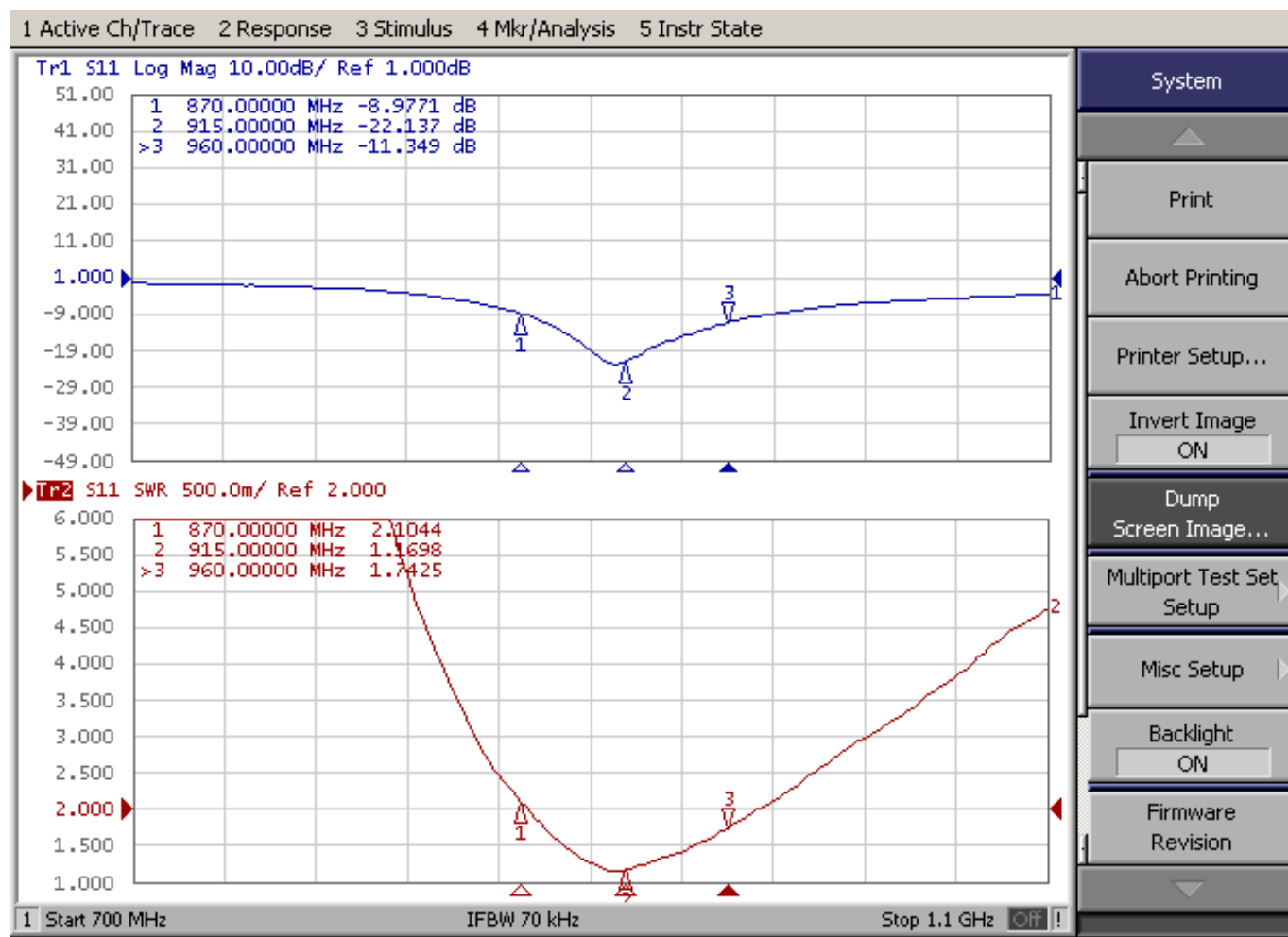
Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 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

Product Number: AN0915-13A09BTM

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4. Antenna - S Parameter Test Data

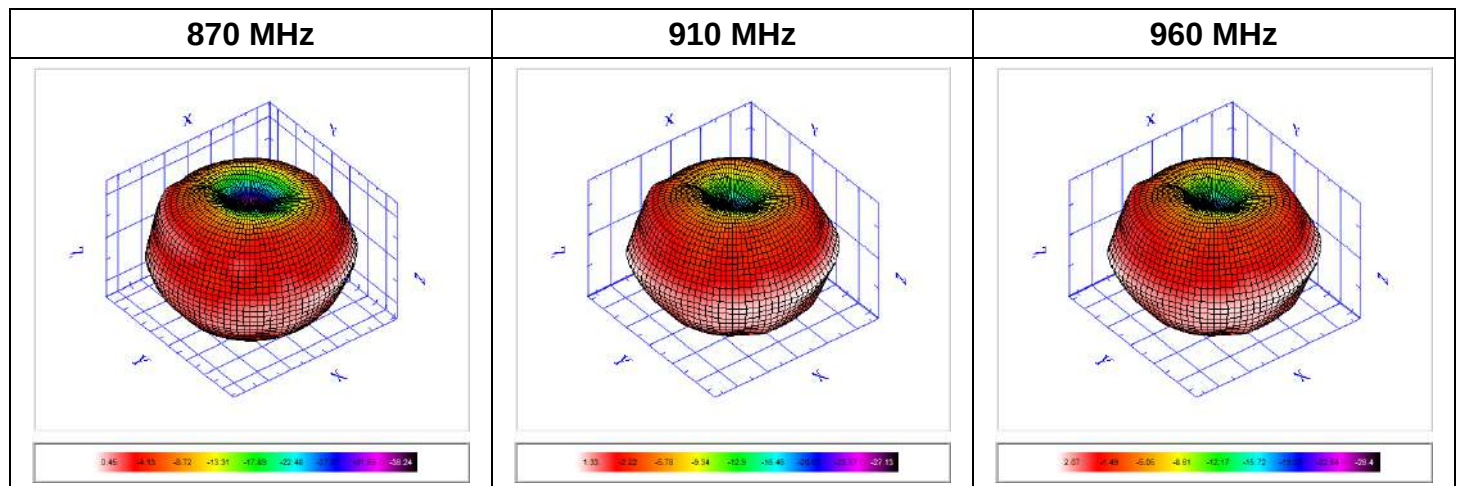


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5. Antenna - Radiation Pattern Test Data



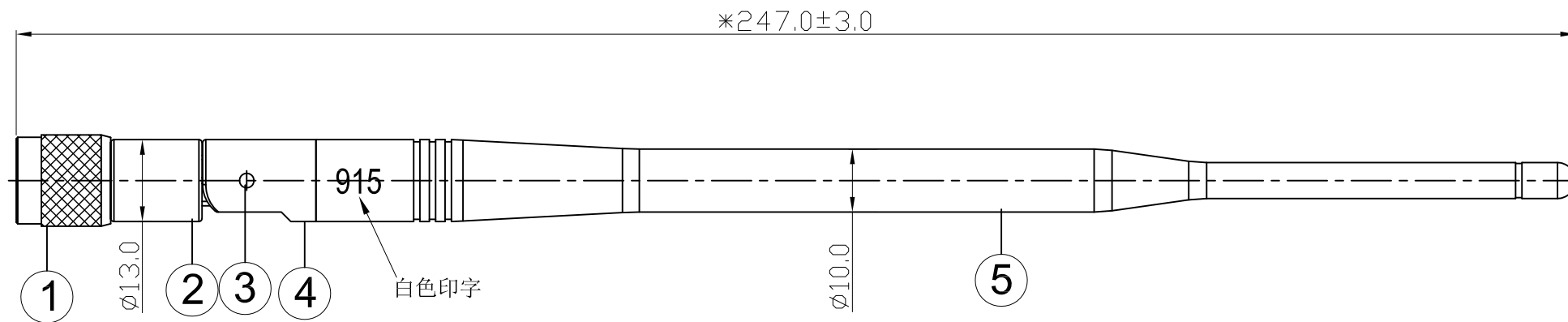
Frequency	870	880	890	900	910	920	930	940	950	960
TRP (dBm)	-2.84	-2.89	-2.23	-2.29	-2.26	-2.12	-1.92	-1.72	-1.59	-1.52
Peak EIRP (dBm)	0.45	0.74	1.27	1.3	1.33	1.47	1.67	1.88	2	2.07
NHPRP +/- 45 (degree)	-3.04	-3.12	-2.48	-2.54	-2.51	-2.38	-2.17	-1.97	-1.85	-1.78
NHPRP +/- 30 (degree)	-3.78	-3.84	-3.16	-3.19	-3.16	-3.02	-2.82	-2.62	-2.49	-2.42
E-Theta Peak Gain (dBi)	-16.27	-16.28	-17.37	-17.82	-17.79	-17.65	-17.45	-17.25	-17.12	-17.05
E-Phi Peak Gain (dBi)	0.44	0.72	1.26	1.29	1.32	1.45	1.65	1.86	1.98	2.05
E-Total Peak Gain (dBi)	0.45	0.74	1.27	1.3	1.33	1.47	1.67	1.88	2	2.07
Directivity (dBi)	3.29	3.63	3.5	3.59	3.59	3.59	3.59	3.59	3.59	3.59
Efficiency (%)	52.05	51.38	59.79	59.04	59.45	61.31	64.25	67.33	69.27	70.39

RoHS

Compatible



SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			

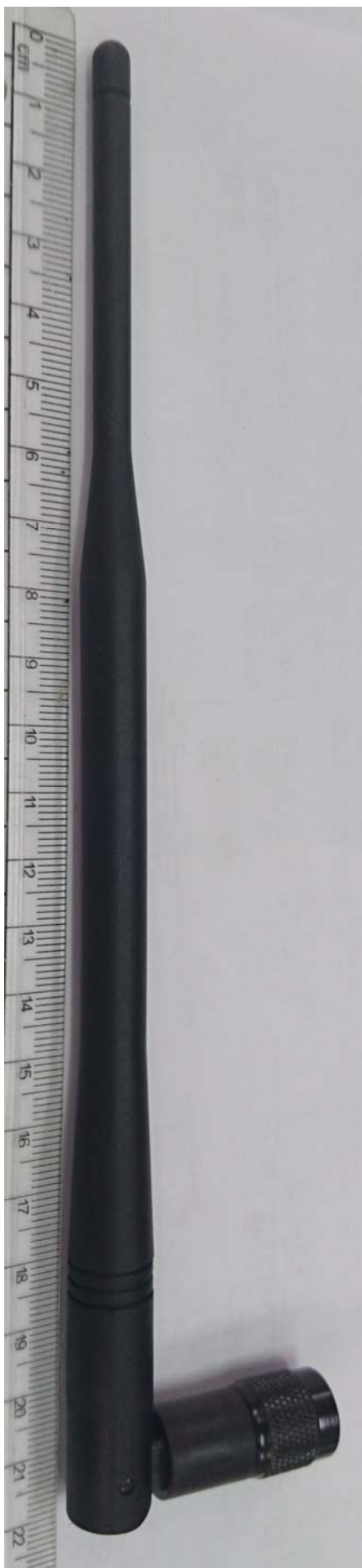


Note:

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

5	AN13B-01B	Body3	TPEE	Black	1
4	AN9203-02B	Body2	ABS	Ø6.5*28.1mm	1
3	AN03-515CZ	Pin	Cu	Black Zn Plated	2
2	AN0303-T04B	Body1	ABS	Black	1
1	TNC124-CCT5AN13	TNC Male	Cu	Eletrodeposition	1
No.	Part Number	Name	Material	Finish	Q'ty

Invax System Group.				Cortec Technology Inc.	
Cortec				Http://www.invaxsystem.com E-mail:info@invax.com,tw	
				Tel :886-2-27885218 Fax:886-2-27831658	
TITLE: 870~960MHZ ANTENNA					
PART NO.:AN0915-13A09BTM				CUSTOMER P/N: /	
APP BY	CHK BY	RF BY	DES BY	 UNITS: mm SCALE: 1/1 REVISION: A	Tolerance
Grant	Kenny	SF	WANGWEI		X.X ±0.5 X.XX ±0.2 X° ±1
2017/09/11	2017/09/11	2017/09/11	2017/09/11		



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