

承 认 书

APPROVAL SHEET

客 户 : _____

客户机型 : _____

品名 : _____ 2.4G铜管天线 _____

规格 : _____ RG113 深灰镀银锡 L=115mm _____

HJ-Tech P/N : HJ-ANT115-004

日期 : _____ 2012-03-27 _____

深圳市皇捷科技有限公司

ADD : 深圳市宝安区沙井芙蓉大道联兴工业园 5 栋 3 楼

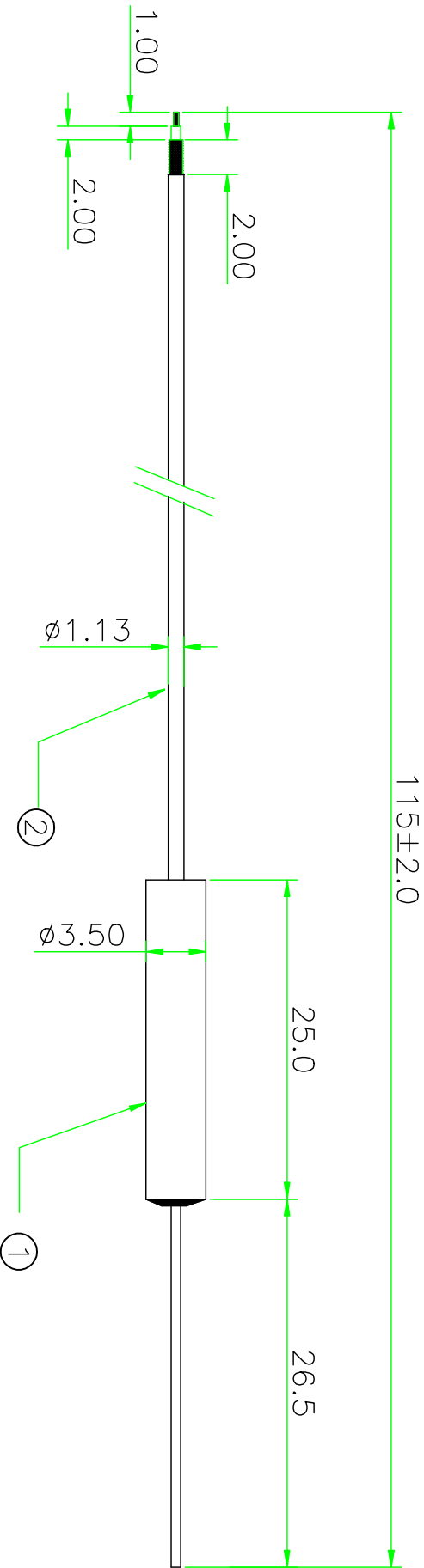
TEL : (0755) 2994-2120

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http : //www.iphone-line.com

GREEN
PRODUCT

RoHS



BOM明细表

序号	零件名称/规格	描述	材料	外观	用量	版本
3	I-PCB	镀金	ALLOY		1	A/1
2	铜管	3.5*25	ALLOY		1	A/1
1	CASE	L=115mm 深灰	RG113		1	A/1

GENERAL TOLERANCE	Angle	±5°
	.00	±1.00
	.00	±0.50
	.000	±0.20

品名	2.4G铜天线 配RG113
TITLE:	
料号	HJ-ANT0115-004
PART NO.	

DESIGN 设计	Core
CHECK 审核	Anlan
APPRO 批准	LEO

SCALE	Free
UNIT:mm	A4
SHEET: 1 of 1	

变更单号	ECN(DCN) NO.
版本	A0
日期	3/29-11
说明	NEW
修改	Core
确认	TOM
APPRO 批准	LEO

深圳市皇捷科技有限公司

Product Name: Antenna

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Product Number: NB0175-C1

Product Name: Antenna

1. Specification

Sample Photo	
A. Electrical Characteristics	
Frequency	2400 ~ 2500 MHz
S.W.R.	<= 2.0
Efficiency	65 ~ 75 %
Polarization	Linear
Impedance	50 Ohm
Antenna Type	PIFA
B. Material & Mechanical Characteristics	
Material of Radiator	Metal (C7521)
Cable Type	O.D. 1.13 mm (Black)
Connector Type	Mini Connector for O.D. 1.13 mm Coaxial Cable
Pull Test	>= 1.0 Kg
C. Environmental	
Operation Temperature	- 40 °C ~ + 65 °C
Storage Temperature	- 40 °C ~ + 80 °C

Product Number: NB0175-C1

Product Name: Antenna

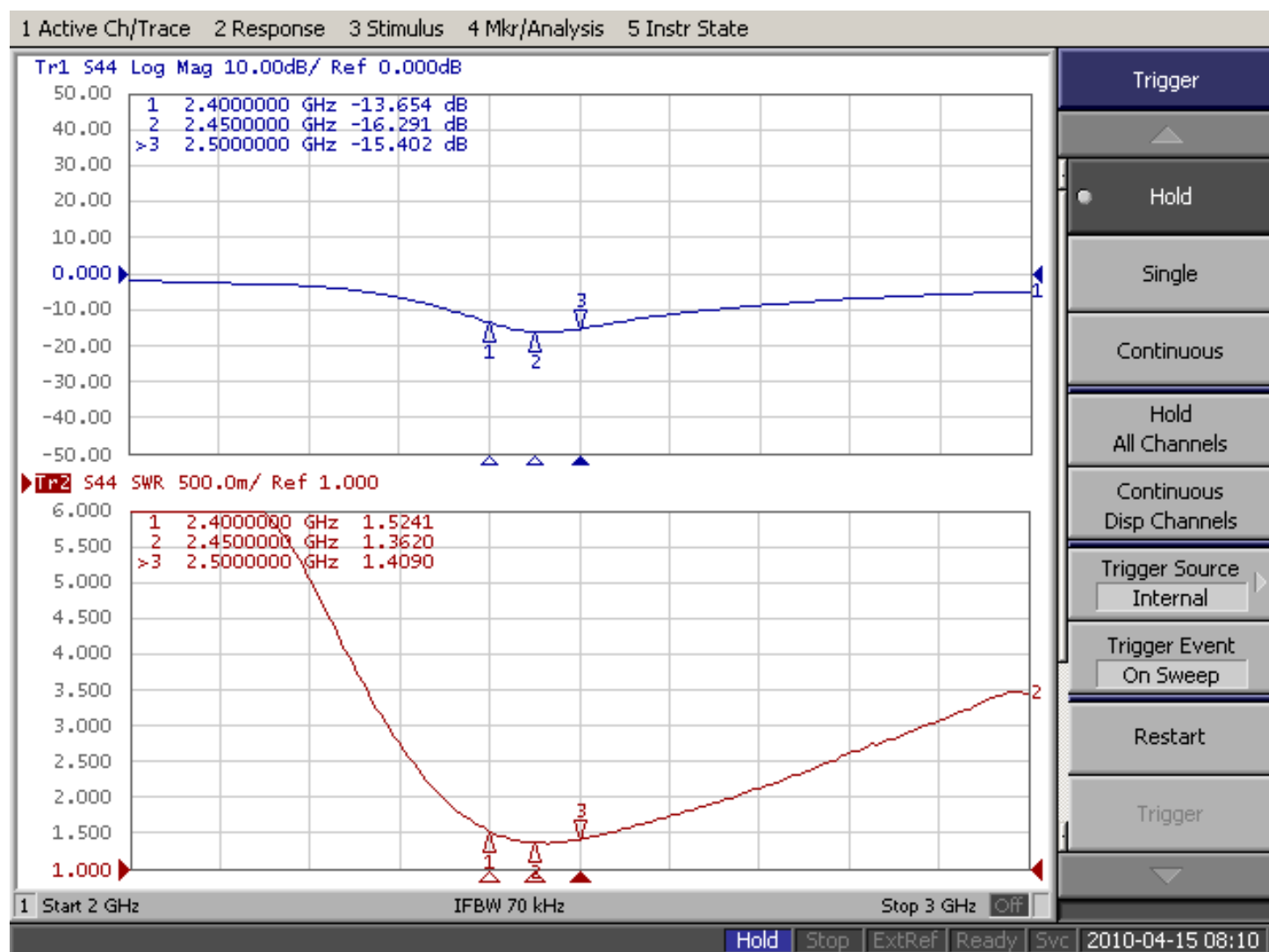
2. Characteristics and Reliability Test

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	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	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: 48 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: 48 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	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.)	MIL-STD-202G, 108A, cond. A Temp: 85°C; Time: 96 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: NB0175-C1

Product Name: Antenna

3. Antenna - S Parameter Test Data



4. Antenna - Radiation Pattern Test Data

See attached files

5. Mechanical Drawing

See attached files

6. Material Description and RoHS Test Report

See attached files

Model : C1 Antenna
Remark : XZ
Tested by : CORTEC Antenna Lab // Zhao Yao Rong

Location: **Chamber**

Date: **2010/5/6**

Time: **下午 02:19:29**

Temperature (°C): **22.00**

Humidity (%): **55.00**

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (db)	0.64	0.77	-0.16	-0.18	-0.09	-0.04	0.24	0.47	0.6	0.65	0.59	0.3
Peak Degree	150	150	150	150	150	150	150	150	150	150	306	306
AV Gain (db)	-4.54	-4.25	-4.7	-4.65	-4.28	-4.38	-3.98	-3.8	-3.82	-3.49	-3.64	-3.87

