

Product Number: WF2400-113IPEX

Product Name: 2.4GHz 蓝牙天线

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1. Specification

A. Electrical Characteristics	
Frequency（频率范围）	2400 ~ 2500 MHz
S.W.R.（驻波比）	≤ 2.0
Antenna Gain（增益）	1.5dBi ± 0.7
Polarization（极化方式）	Linear
Impedance（阻抗）	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator（辐射材质）	Cu
Cable Type（线材类型）	RG-1.13 黑色 总长 150mm
Connector Type（接口）	I-pex 20278MHF1 代
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. $\leq 5\%$
M2	Random	GB / T2423.8-1995	1. No parts separated

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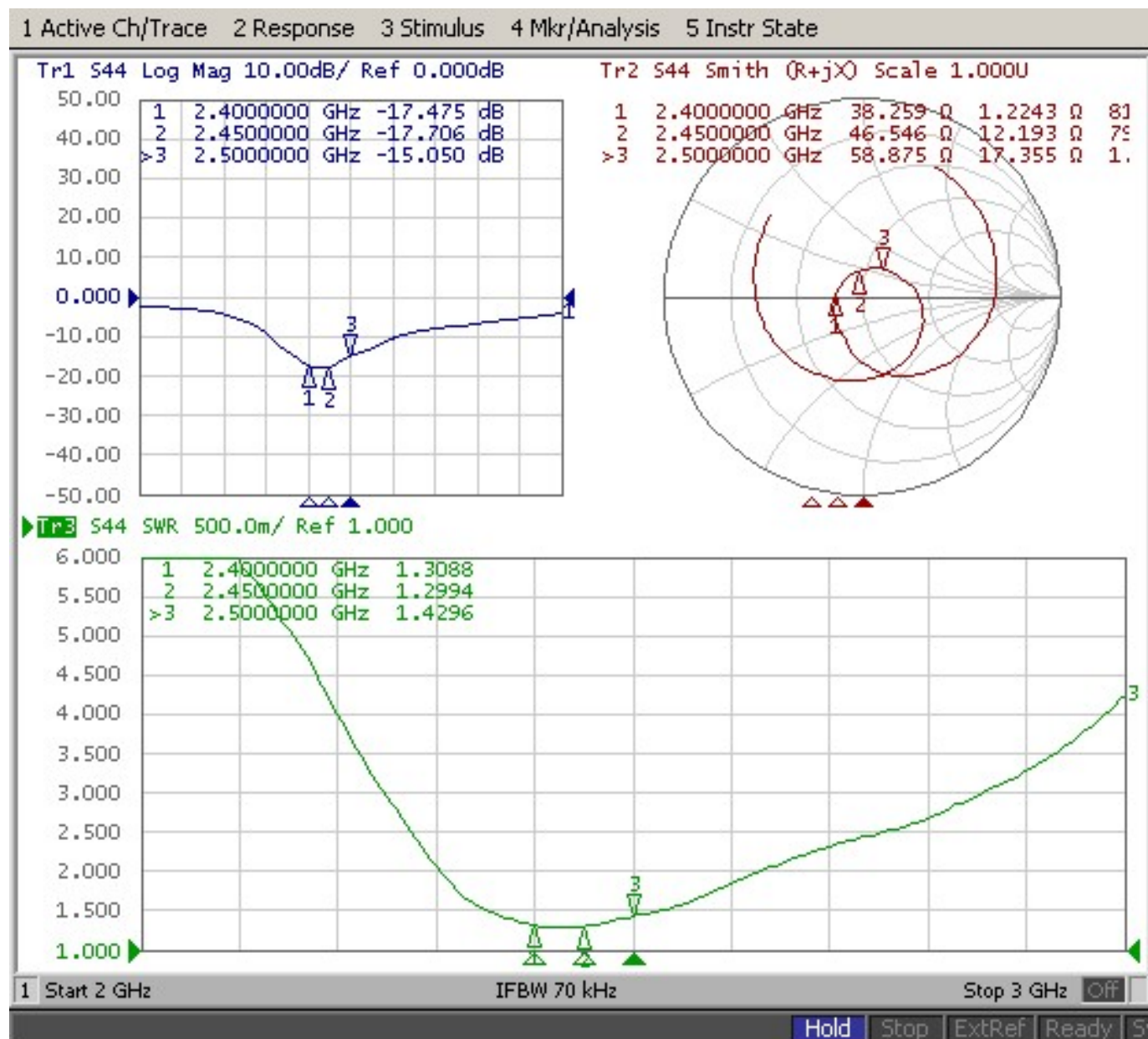
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	Drop	Height: 1.0 Meter; 3 directions; 1 time for each direction	2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal- Pull Test	Holding with individual 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

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3. Antenna - S Parameter Test Data



A

B

C

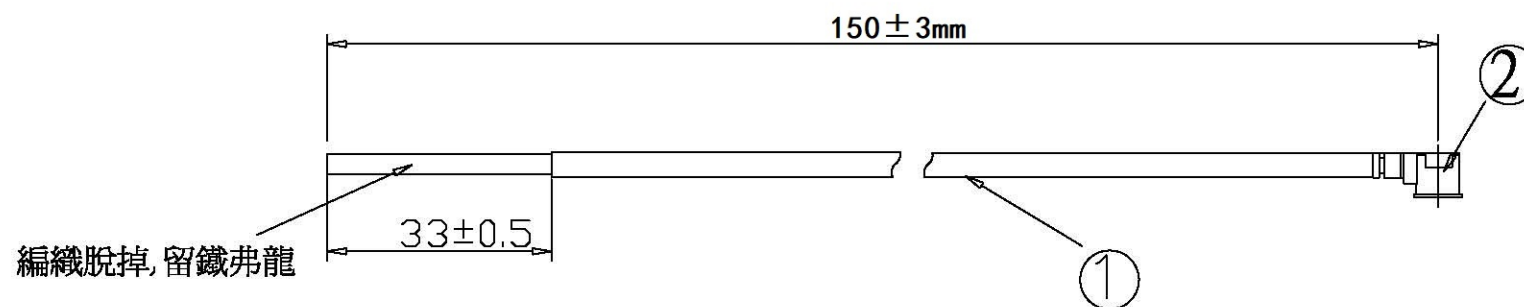
D

E

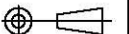
REVISIONS

SYM	ECN No.	DESCRIPTION	DATE	APPROVED
A		RELEASE TO PRODUCTION	22-APR-2010	Kevin

*:重點檢驗項目



2	IPEX	銅;鍍金	MHF-20278-111R-13	1
1	線材	O.D.1.13mm;黑色	L=150MM	1
序號	品名	材料	規格	數量

TOLERANCES UNLESS OTHERWISE SPECIFIED		.X ±0.2, XX ±0.10, XXX ±0.05				
		X, ±2° ,X ±1°				
DRAWING Kevin		MATERIAL SEE NOTE		5		
CHECKED		UNITS MM				
APPROVAL		PART NO 00X000-Open		SIZE A4	DRAWING NO 00X000-Open	REV A
		SCALE 1 : 1		NAME I-PEX 150MM 天线		



Model: 2.4GHz Antenna
Remark: H-Plane V-Pol
Tested by: Antenna

Location: Chamber

Temperature (°C): 25.0

Time: 上午 10:35:55

Approved by:

Freq. (MHz)	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Peak Gain (dBi)	1.7	2.26	1.52	1.23	1.79	1.88	2.05	2.11	1.92	1.95	1.5	1.32
Peak Degree	218	218	207	208	313	313	250	250	303	261	271	250

