

Manufacturer: Dongguan Fangge Electronics Co., Ltd.

Manufacturer add.: Room 502, Building B, Tongxin Industrial Park, 19D Zhugang Road, Shatou, Changan Town, Dongguan City, Guangdong Province, China

Product Number: 最小板 FPC

Product Name: WIFI 2.4GHZ Antenna FPC 天线

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1. Specification

A. Electrical Characteristics	
Frequency 天线频率	2400-2500MHZ
S.W.R. 驻波比	< 2.5
Antenna Gain 天线增益	2 dBi ±0.7
Polarization 极化方式	Linear 线性极化
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Radiator 材质	FR-4
Cable Type 线材类型	RG-0.81 黑色线
Connector Type 天线接口	I-pex 4 代接口
Cable length 天线长度	焊点算 6CM
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-	Holding with individual specification; force applied	1. Directive DUT specification

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	Pull Test	to axis of terminal	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

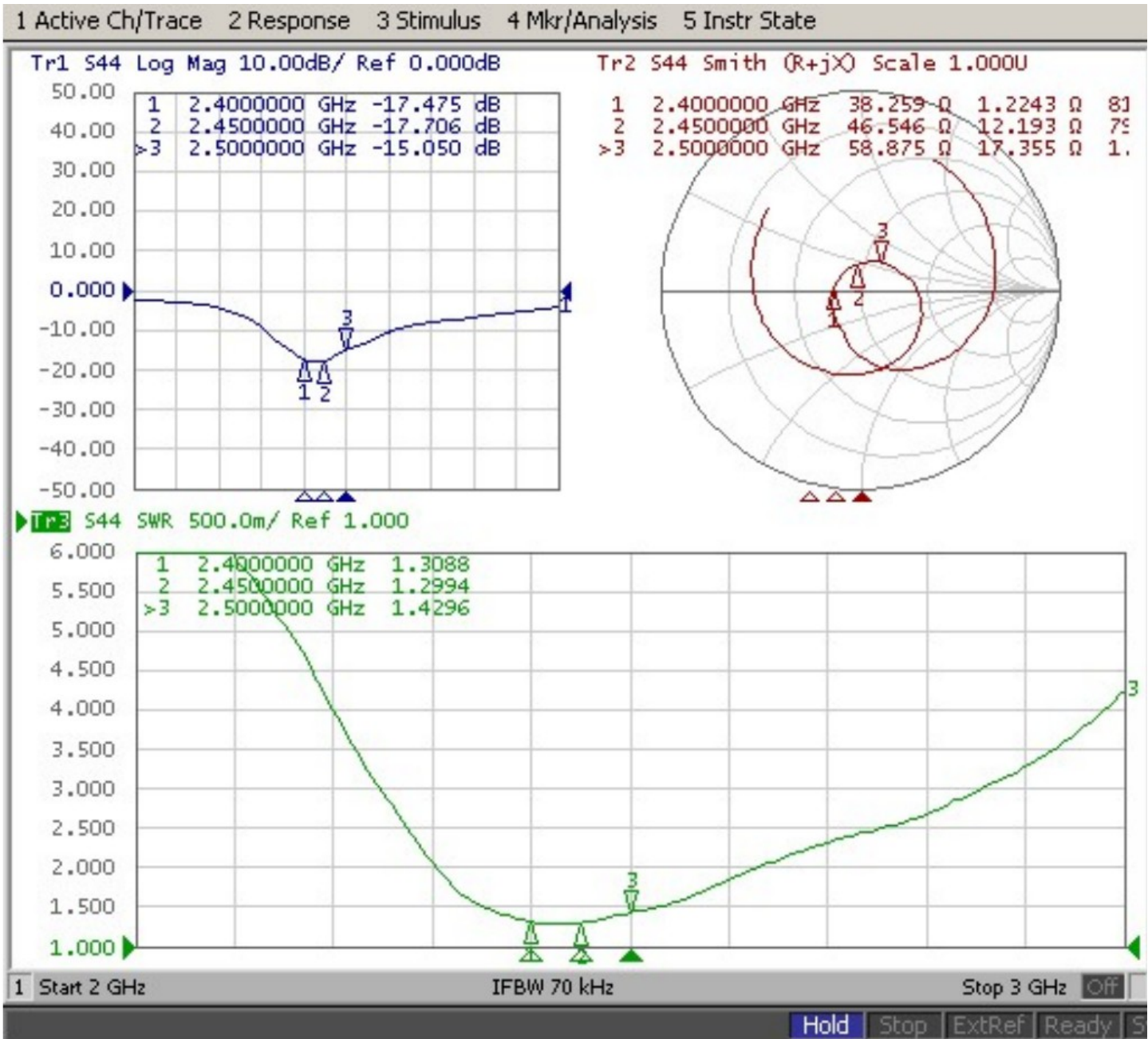
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3. Gain

2.4-2.5G		
Fre.(MHz)	Efficiency(%)	Gain(dBi)
2400	47.83%	1.78
2420	48.75%	1.43
2440	52.27%	2.00
2460	48.77%	1.89
2480	46.37%	1.87
2500	48.01%	1.89

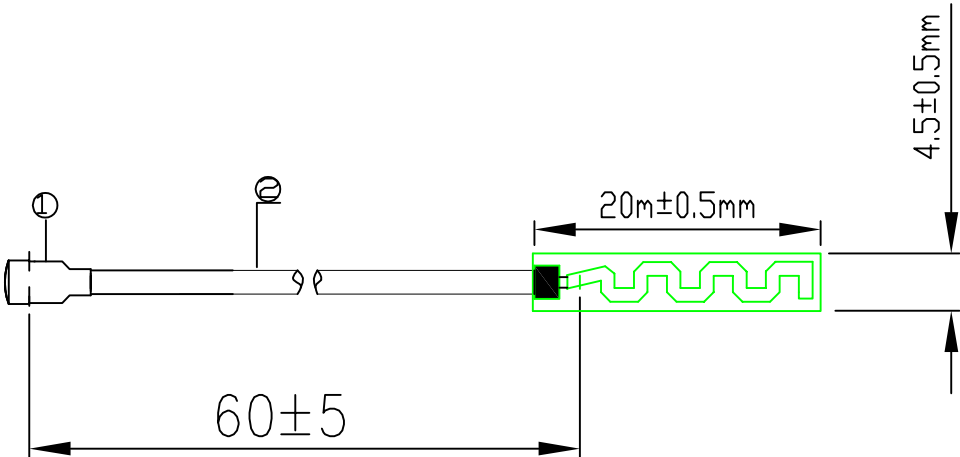
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3. Antenna - S Parameter Test Data



RoHS
Compatible

SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



备注：帶*尺寸為重点控制尺寸。
未注公差參照标准公差。

3	PCB-2458	FPCB: W*L=20*4.5mm 黑色	1	PCS
2	RG0.81	线材: RG081 ø0.8m 铜镀锡 黑色	0.81	M
1	IPEX	接头 IPEX4代-01 铜镀金	1	PCS
序号	物料编号	物料名称规格	用量	单位

东莞市方格电子有限公司				
ADD: 广东省东莞市长安镇沙头珠岗路19D同鑫工业园 B栋502				
TITLE: WIFI 2.4GHZ Antenna FPC 天线				
PART NO: AN2458-1395L60			DWG NAME: AN2458-1395L60	
APPROVED BY	CHECKED BY	DESIGNED BY		Tolerance
		Xuwen	UNITS: mm	X.X ±0.2
		2026.07.16	SCALE: 1/1	X.XX ±0.1
			REVISION: A	X° ±1°