

Product Number: HJ2400-BA261001TQ
Product Name: Antenna

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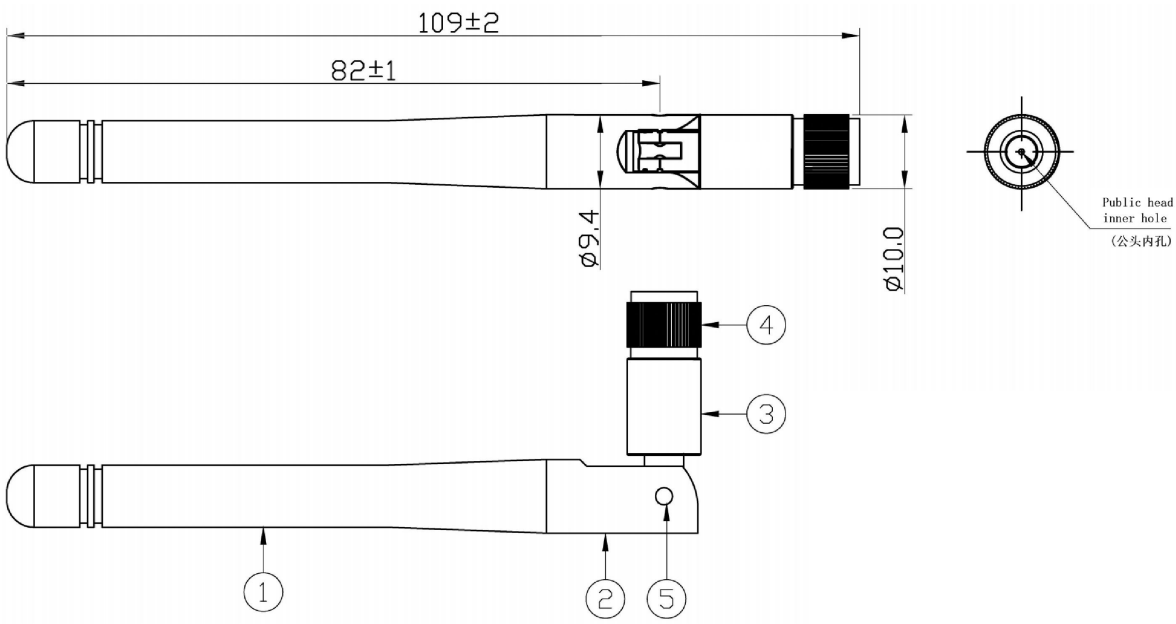
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Revision History (变更履历)

Revision	Date	Change Notification	Description
1.0	2025.7.26	初版	
1.1	2026-4-13	V1.1	To distinguish, the interface method has been changed to a male inner hole, in compliance with FCC and CE requirements

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1. Specification

Sample Photo	
	
A. Electrical Characteristics	
Frequency 频率	2400-2500 MHz
S.W.R. 驻波比	<= 2.0
Antenna Gain 增益	2.61dBi
Polarization 极化方式	Linear
Impedance 阻抗	50 Ohm
B. Material & Mechanical Characteristics	
Material of Plastic 塑胶材质	TPEE/ABS/PC+PBT/POM
Cable Type 线材规格	RG178
Connector Type 连接器规格	SMA Plug(公头公针)
C. Environmental	
Storage Temperature 存储温度	- 30 °C ~ + 65 °C
Operation Temperature	- 30 °C ~ + 65 °C

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工作温度	
Antenna Color Storage life 天线颜色存储寿命	< 2 year

2. Characteristics and Reliability Test

Test Items 测试项目		Test Condition and Procedure 测试方法	Requirements 要求	Result 结果
1	V.S.W.R. 电压驻波比	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
2	Insertion Loss 插入损失	Set DUT on Network Analyzer; make individual calibration to test 设置网络分析仪参数进行测试	Directive DUT specification 符合待测物规范	PASS
3	Antenna Gain 天线增益	Set DUT on Antenna Chamber; make individual calibration to test 设置天线暗室参数进行测试	Directive DUT specification 符合待测物规范	PASS
4	Voltage Breakdown 耐电压	Test voltage should be applied between insulated portions, or between ground as specified. 在绝缘部分测试电压,或指定接地面之间	Max Voltage ≥ 500 V or directive material specification 最大电压 ≥ 500 V 或符合材料规范	PASS
5	Insulation Resistance 绝缘阻抗	Set Voltage: 500 ± 50 V; between the insulated portions, or between ground as specified. 设置电压 500 ± 50 V,在绝缘部份测试或指定接地面之间	Resistance ≥ 500 M ohm or directive material specification 阻抗 ≥ 500 M ohm 或符合材料规范	PASS
6	Contact Resistance 接触阻抗	Air Temp: 26°C ; measured with test equipment 室温 26°C , 指定量测设备	Directive material specification 符合材料规范	PASS
7	Vibration 震动	GB / T2423.48-2008 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20	1. No Visual Damage 2. Frequency Tol. $\leq 5\%$	PASS

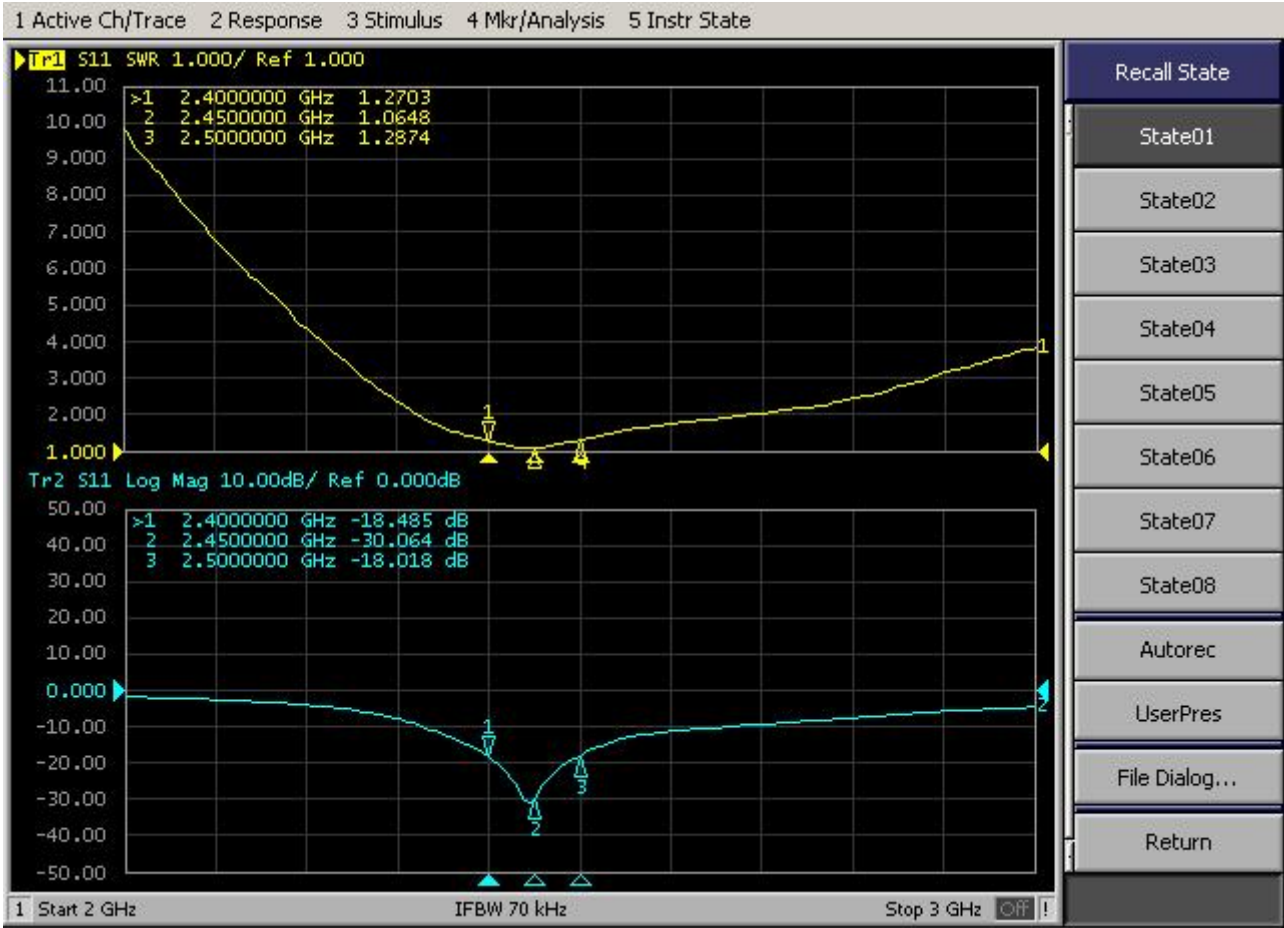
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		Hz 3 directions; 2 hours for each direction 振幅 1.5mm; 频率 20~80~20Hz; 3 个方向各 2H	无明显外观不良;频率偏移≤5%	
8	Random Drop 跌落	GB / T2423.8-1995 Single: Height: 1.0 Meter; 3 directions; 1 time for each direction 单支天线, 高 1m; 3 个方向各 1 次	1. No parts separated、fracture 2. Frequency Tol.≤5% 产品无脱落、断裂;频率偏移≤5%	PASS
		Packing: Height: 0.76 Meter; 1 corner, 3 edges, 6 surface 包装: 高 0.76m, 一角、三棱、六面各一次		PASS
		Antenna+Machine:Height: 0.76 Meter; 1 corner, 3 edges, 6 surface.整机: 高 0.76m, 一角、三棱、六面各一次		PASS
9	Solderability 可焊性	GB / T2423.28-2005 Temp: 260±5° C;Duration: 5 seconds 温度 260±5° C;持续 5 秒	Tin evenly on full 上锡均匀饱满	PASS
10	Pull Test 拉力	Holding with individual specification; force applied to axis of terminal .单独定义产品端子拉力	1. Directive DUT specification 2. Frequency Tol.≤5% 符合待测物规范;频率偏移≤5%	PASS
11	Torque Test 扭力	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal 单独定义产品端子之顺时针及逆时针扭力	1. Directive DUT specification 2. Frequency Tol.≤ 5% 符合待测物规范;频率偏移≤5%	PASS
12	Dimension 尺寸	Inspection of dimension, color, material, package, surface process.检查尺寸,颜色,材料,包装,表面处理	Directive DUT specification 符合待测物规范	PASS
13	Waterproof 防水	With Reference to IEC 60529 // IP Code Definition 参考 IEC60529 IP 定义	Directive DUT specification 符合待测物规范	N/A
14	Salt Spray 盐雾	GB / T 2423.17-2008 Temp: 35°C; RH: ≥ 95%; NaCl solution: ≥ 5%;Time: 24H 温度 35°C; 湿度≥95%;盐水浓度≥5%; 测试 24H	1. No Visual Damage 2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	PASS
15	Temperature and Humidity Chamber 恒温恒湿	GB / T 2423.3-2006 Temp: 65°C / 12 H; -30°C / 12H RH: ≥ 90%; Time: 24H 温度 65°C 测试 12H 转-30°C 测试 12H; 湿度≥ 90%; 时间 24H	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.≤5% 恢复 2H 后, 无明显外观不良;频率偏移≤5%	PASS
16	Aging test 老化	GB / T 2423.2 - 2008 Temp: 65°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage	PASS

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		温度 65° C, 测试 24H	2. Frequency Tol.≤5% 无明显外观不良;频率偏移≤5%	
17	RoHS	With Reference to IEC 62321:2008 with flow chart 参考 IEC 62321 测试流程	Directive RoHS 2011/65/EU 符合 RoHS 2015/863/EU 标准	PASS

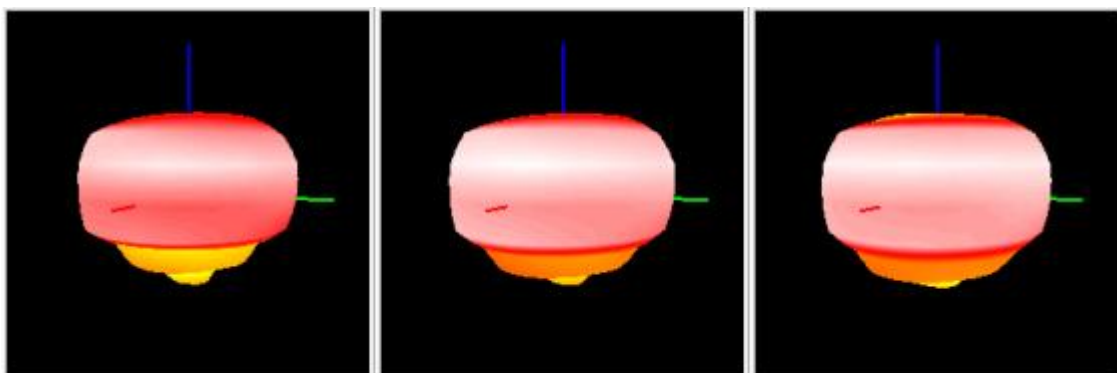
3. Antenna - S Parameter Test Data



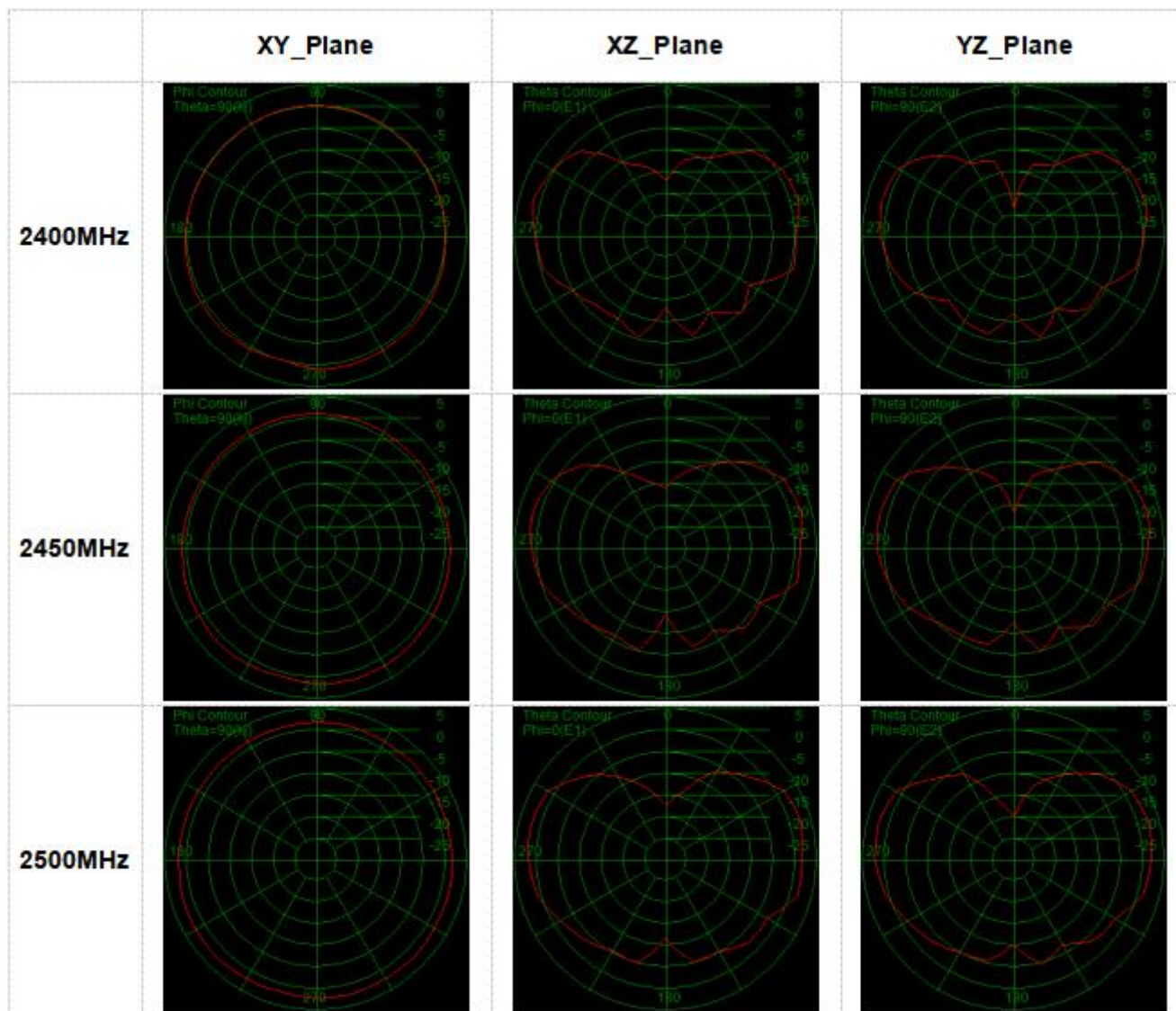
Frequency (MHz)	2400.0	2450.0	2500.0
Efficiency (%)	77.80	91.10	93.90
Gain (dBi)	2.20	2.40	2.61

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4. Antenna - Radiation Pattern Test Data



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5. Mechanical Drawing See attached files