

Antenna specification sheet

2400Mhz universal spring antenna

Model number: HantTH2400-01

Manufacture: Beijing Gsino Science&Technology Co.,Ltd

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Chapter 1 Product Introduction

This spring antenna is a built-in spring antenna that operates at 2400MHz. The total length of the antenna is 6mm, with a spiral diameter of 4.5mm and a wire diameter of 0.6mm. The antenna material is stainless steel with nickel plating. This antenna is suitable for various sky frequencies using 2400MHz

Built in electronic products, communication equipment, etc.

Chapter 2 Specification Parameters

Electrical parameters	
center frequency	2450Mhz
Antenna bandwidth	2400Mhz-2500Mhz
Antenna gain	3dB
Standing wave ratio	<1.6
Polarization direction	Vertical polarization
Radiation direction	omnidirectional
Input impedance	50Ω
maximum power	10W
Other parameters	
length of antenna	6mm
Spiral diameter	4.5mm
Wire diameter	0.6mm
Antenna material	Stainless steel nickel plating
Interface specifications	Welding interface
working temperature	-40℃~+80℃

Chapter 3 Reference Design

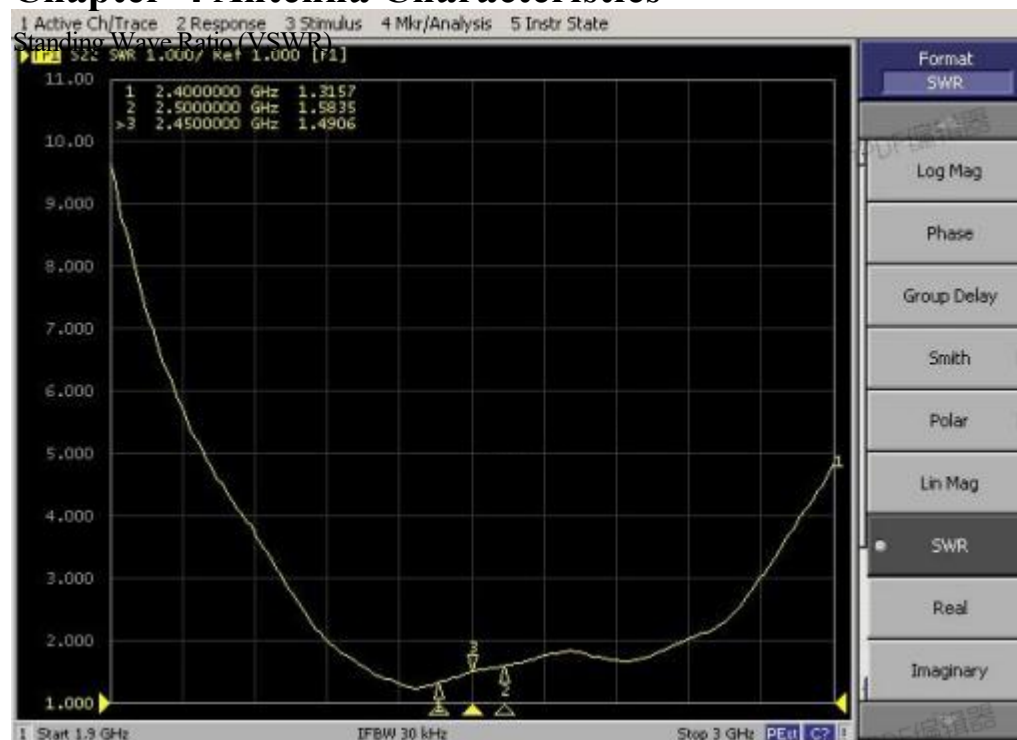
The conventional reference design is shown in the figure on the right.

The PCB below the antenna body cannot be laid on the ground (as shown in the figure on the right).

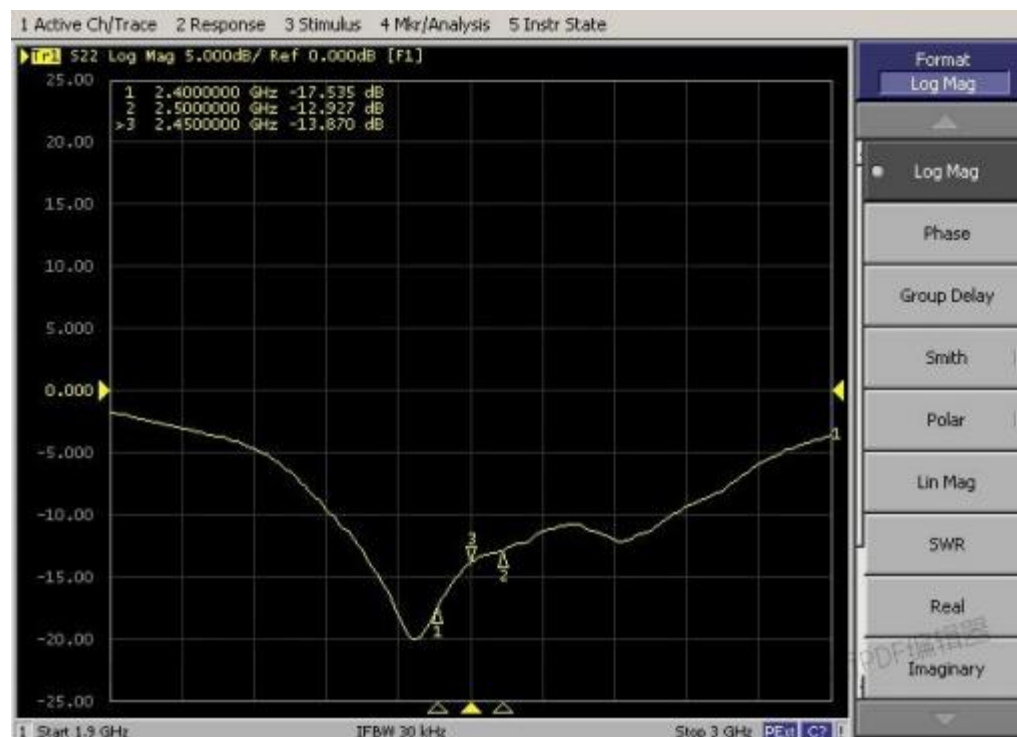
It is not recommended to lay the ground around the antenna pad, as the ground around the pad is different from

It is recommended to maintain a spacing of at least 1mm between solder pads.

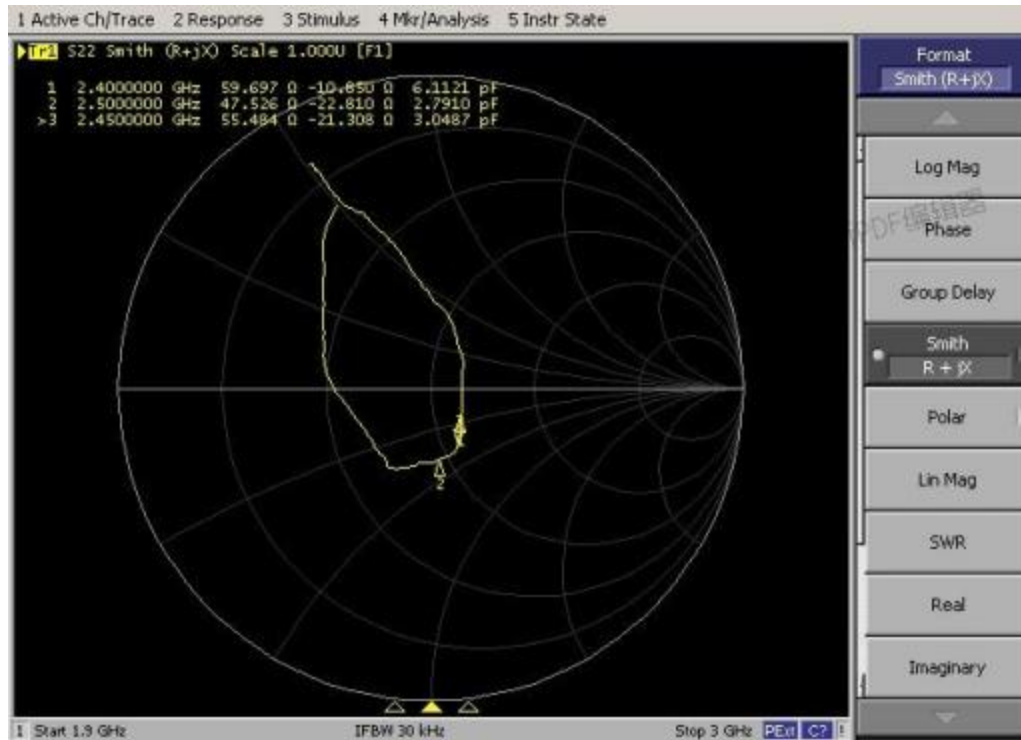
Chapter 4 Antenna Characteristics



*Return Loss



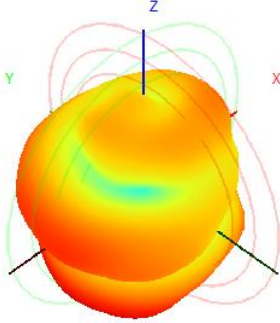
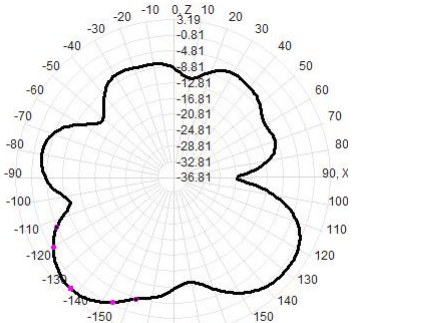
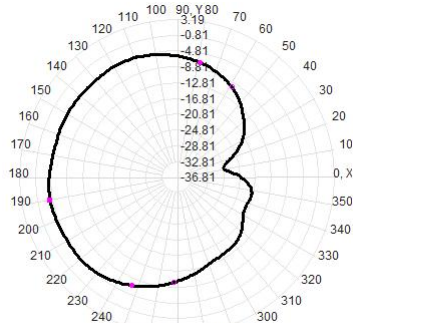
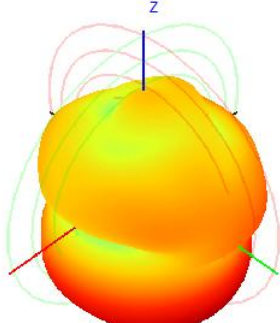
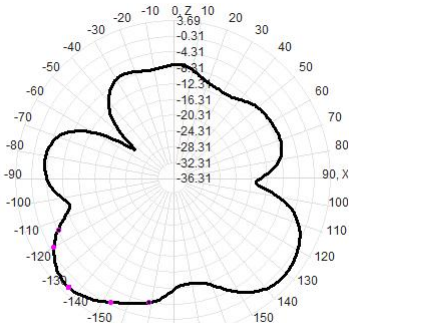
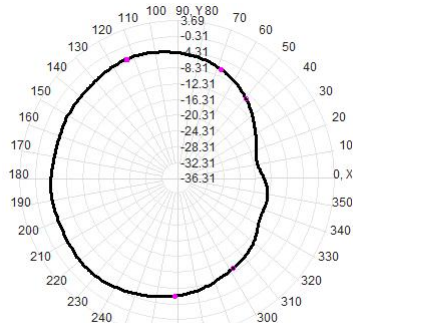
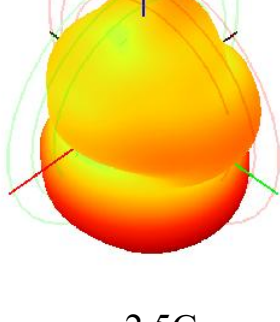
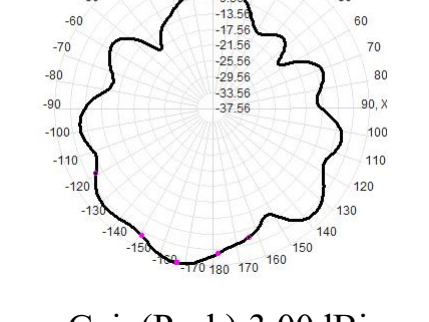
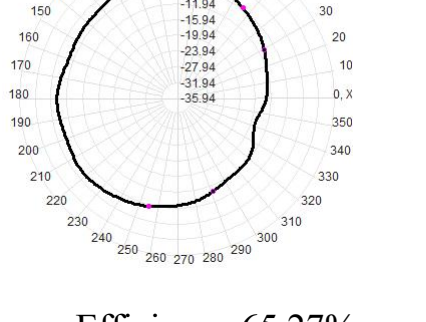
Smith Chart



Chapter 5 Precautions

1. This spring antenna should be soldered to the corners or edges of the circuit board, and there should be no PCB board laid on the bottom of the antenna body,
2. Except for the circuit board, conductor materials cannot be placed within 5mm in any other direction around the antenna, and the farther the antenna is from the conductor, the better.
3. It is recommended to maintain consistency in the welding direction of the antenna, as inconsistent welding directions may lead to inconsistent antenna performance.
4. The impedance of the antenna may deviate due to the structural differences of different customer products. If you encounter this situation, please contact our company for technical support.

2D、3DRaditation Pattern

		
<p>2.4G</p>	<p>Gain(Peak):2.65dBi</p>	<p>Efficiency:57.35%</p>
		
<p>2.45G</p>	<p>Gain(Peak):2.71dBi</p>	<p>Efficiency:60.53%</p>
		
<p>2.5G</p>	<p>Gain(Peak):3.00dBi</p>	<p>Efficiency:65.27%</p>

