DreamLNK

SPECIFICATION

Shenzhen DreamLNK Technology Co., Ltd.
深圳市骏晔科技有限公司

2.4Ghz Spring Coil Antenna

Product Specification

Client Name		**Frequency Band**	2400~2500MHz
Product Name		**Version**	V1.0
Customer's Part Number		**DreamLNK's Part Number**	DL-T021-2.4G
RF Designer	Peter Wang	**RF Manager**	Knight Ai
Structural Designer		**Structural Design Manager**	
Technical Director	Fagan Xu	**Date**	2019-11-27

Client confirmation:

Whether the product meets your requirements? ☐ **OK** ☐ **NG**

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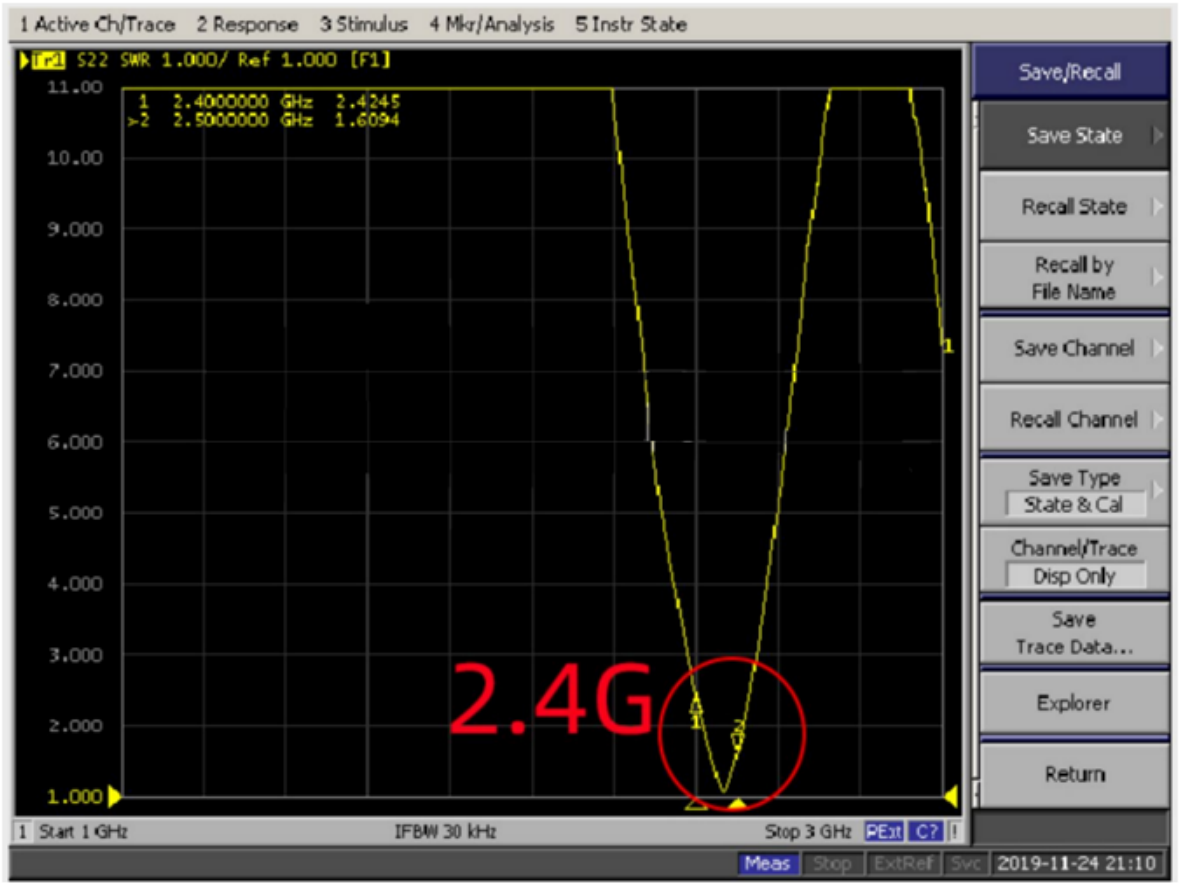
1. Photos

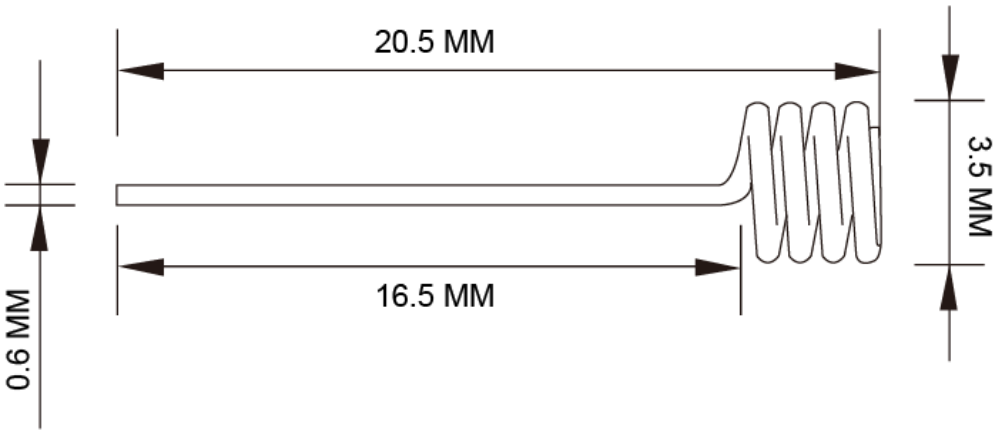
2. Parameters

Test Parameters			
Product Name	**2.4Ghz Spring Antenna**	**Model No**	DL-T021-2.4G
Electrical Specifications			
Frequency Range	2400~2500MHz	**Polarization**	Vertical
Input Impedance	50 Ω	**Radiation direction**	Omnidirectional
VSWR	≦1.5	**Power Capacity**	10W
Gain	3.0 dBi	**Bandwidth**	100Mhz
Mechanical Specifications			
Dimensions	D3.5*20.5 mm	**Color**	Gold
Installation	Welding on PCB	**Antenna Material**	Phosphor bronze
Relative Humidity	40~85%	**Working Temperature**	-40℃-+85℃

3. S11 DATA (VSWR, Return loss, Smith)

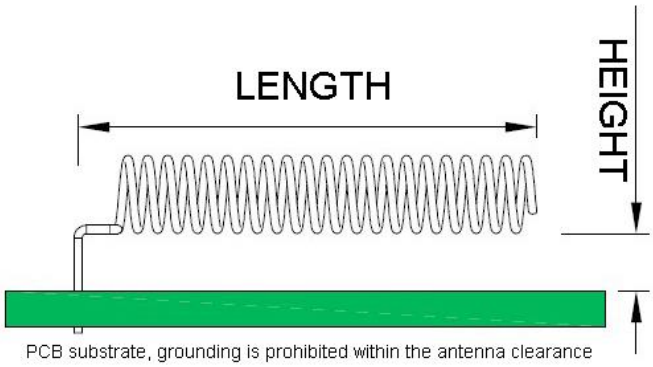


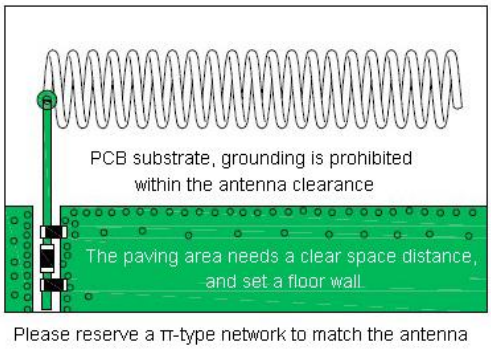
4. Structure Diagram

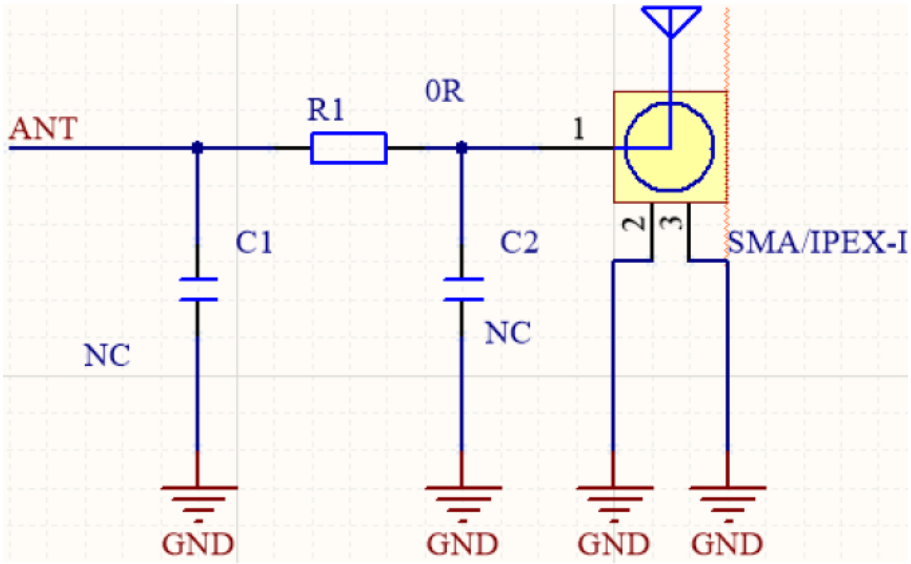


Wire Diameter	Circle Diameter	Circle Length	Total Length
OD @ 0.6mm	OD @ 3.5mm	4 mm	20.5 mm

5. Application & Design Guidance







Note: When making the antenna design, many factors need to be considered, such as the product appearance structure, the position of the RF module's signal input and output interface, the location of interference sources inside the product, etc. After taking all these factors into consideration, we can then determine the antenna location, angle, distance from the paved ground, and height from the PCB substrate.

Please reserve a π-type network to match the antenna. When debugging the antenna, be sure to provide a complete product shell and internal PCBA function board, calculate the external interference source and parasitic capacitance into the matching, so that the antenna can achieve the best performance indicators and work efficiency.

The PCB trace of the matching network refers to the 0.5mm line width, and the grounding on both sides of the network refers to the 0.35mm spacing to maintain good impedance characteristics.

6. Contact us

Shenzhen DreamLnk Technology Co., Ltd

★ Data collection, Smart home, Internet of Things applications, Wireless remote control technology, Remote active RFID, Antennas ★

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