

Specifications For 2.4G Copper Tube Antenna

Company Part Number

2.4G Copper Tube Antenna(D809-2001)- 150MM

Shenzhen Kexin Wireless Technology Co., Ltd.

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Street, Longgang District, Shenzhen

1. General Items

1.1 Scope of Application

This specification only applies to 2.4G copper tube antennas (D809-2001).

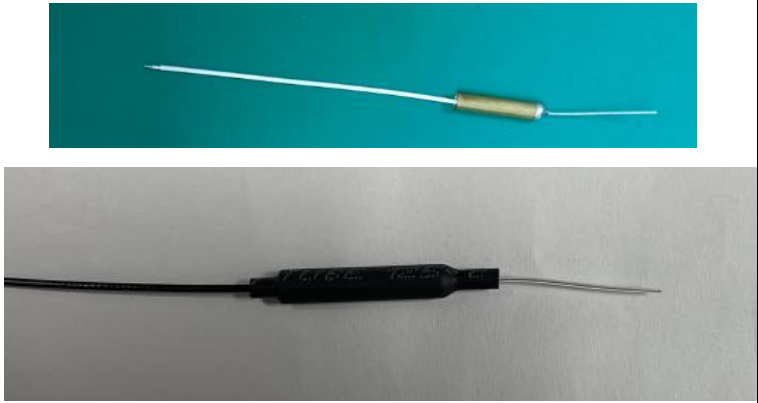
1.2 Operating Temperature

The operating temperature range of this product is -20 to 65°C.

1.3 Storage Temperature

This product should be stored at -30 to 75°C.

2. General Product Specifications

NO	ITEMS	DETAILS
1	Type	2.4G Copper Tube Antenna
2	Frequency Band	2400-2500 MHz
3	VSWR	≤ 3.0
4	Antenna Type	Monopole
5	Impedance	30 Ω
6	Antenna Implementation	Coaxial Cable + Copper Tube
7	Antenna Picture	

3. Detailed Product Specifications

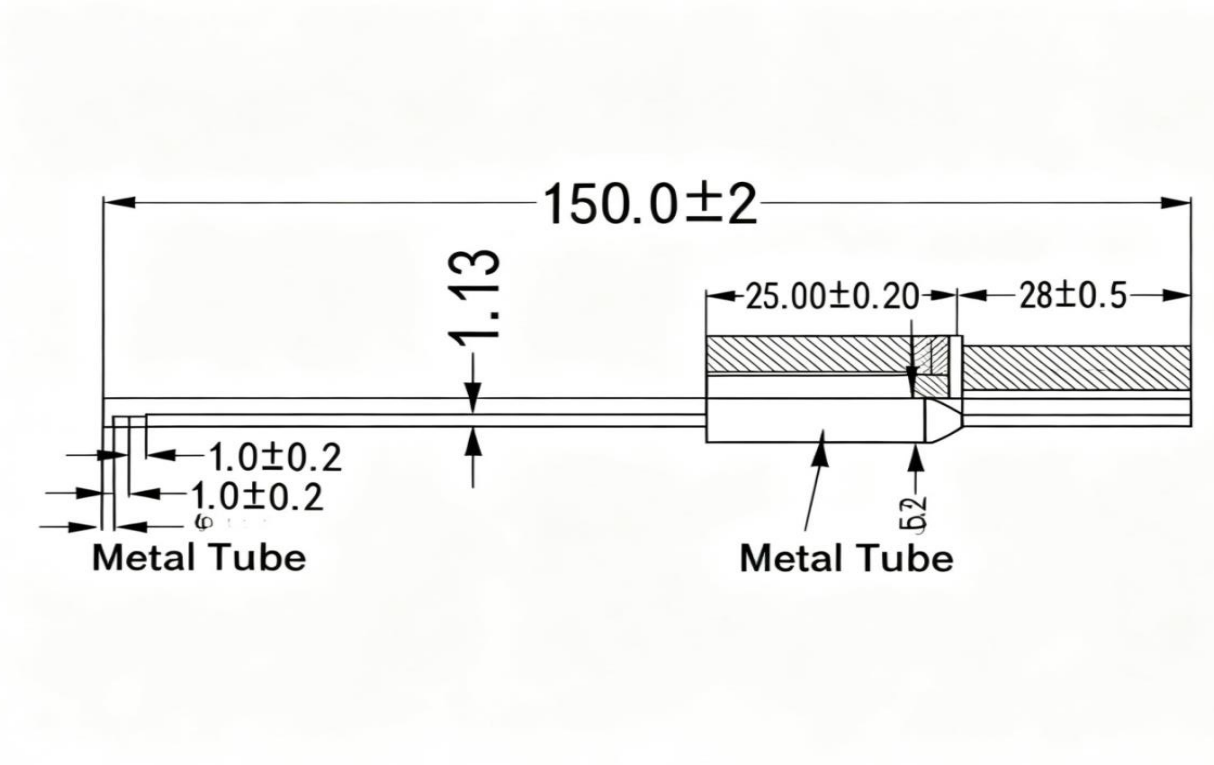
3.1 Structural Parameters

Bill of Materials:

No.	Material	Specification
1	Brass Tube	Φ5*25, Original color
2	Coaxial Cable	Φ1.13, L=150, White
3	Insulating Sleeve	black

3.2 Structural Dimensions

Refer to product drawing:



3.3 Electrical Performance Test Data

3.3.1 Test Environment & Equipment

Test Environment:	Test Equipment:
Temperature: 10°C ~ +30°C	Network Analyzer
Relative Humidity: ≤ 80%(+40°C)	KEYSIGHT E5071C
Atmospheric Pressure:	Anechoic Chamber
750 mm Hg ± 30 mm Hg	

3.3.2 Electrical Performance Test Report

VSWR:



Large size, gain, efficiency and radiation pattern

Frequency ID	1	2	3	4	5	6	7	8
Frequency (MHz)	2400.0	2420.0	2430.0	2450.0	2470.0	2480.0	2490.0	2500.0
Efficiency (dBi)	-2.06	-2.21	-2.13	-2.40	-2.49	-2.39	-2.14	-1.65
Gain (dBi)	2.12	1.68	1.66	1.29	0.75	1.00	1.39	1.97
Efficiency (%)	62.25	60.08	61.21	57.53	56.42	57.64	61.08	68.40
Directivity (dB)	4.18	3.89	3.79	3.69	3.23	3.39	3.53	3.62
Peak Gain Position (Theta)	91.00	90.00	88.00	82.00	94.00	93.00	91.00	90.00
Peak Gain Position (Phi)	128.00	83.00	43.00	346.00	118.00	119.00	119.00	117.00
Efficiency ThetaPol (%)	58.44	56.72	57.91	54.69	54.01	55.41	58.93	66.19
Efficiency PhiPol (%)	3.82	3.37	3.30	2.84	2.40	2.23	2.14	2.21
Upper Hem. Efficiency (%)	35.56	34.88	35.93	33.90	32.80	33.21	35.08	39.15
Lower Hem. Efficiency (%)	26.69	25.20	25.28	23.62	23.62	24.43	26.00	29.25

