



Shenzhen Shuodian Electronic Technology Co.,Ltd

Page number 1-10

Specifications

for

2.4G coaxial antenna

Customer Part Number

Our company's part number

SD-2.4G-Coaxial Cable

Prepared by: Zeng Xiaofeng Reviewed by: Li Ming

Date: 2024.01.17

Shenzhen Shuodian Electronic Technology Co., Ltd.

1st Floor, Building 2, No. 71, Tianwan Road, Tianliao Community, Yutang Street, Guangming District, Shenzhen

Email: sz_shuodian@163.com

Tel: 0755-86006322

Fax: 0755-86006323



Table of contents

Specifications1

Shenzhen Shuodian Electronic Technology Co., Ltd.....1

Contents.....2

1.Confirmation by both parties.....3

2.General terms.....4

3. General product specifications.....4

4.Product Specifications.....5

4.1 Product structure parameters.....5

4.2 Product electrical performance7

5.Product packaging method.....9

6.Document History.....10



Shenzhen Shuodian Electronic Technology Co.,Ltd

Page number 3-10

1. Both parties confirm

1.1 Customer confirmation signature

client:

Department/Position	Signature of confirmer	Confirmed Date
Hardware/RF		
Structure		
Project Manager		
Business/Purchasing		
Approval		

1.2 Confirmation and signature by Shuodian Technology

Department/Position	Signature of confirmer	Confirmed Date
Antenna Engineer		
Structural Engineer		
Project Manager		
QA		
Approval		



Shenzhen Shuodian Electronic Technology Co.,Ltd

Page number 4-10

2. General items

2.1 Scope of application

This antenna is suitable for 2.4G antenna

2.2 Operating temperature range

The operating temperature range of this product is -20 ~ +65 °C

2.3 Storage temperature range

This product is stored at -30 ~ +75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Model	2.4G
2	Frequency range	2400-2500MHz
3	VSWR	≤ 2.0
4	GAIN	1dBi
5	Impedance	50Ω
6	Antenna Type	Monopole
7	Antenna implementation form	Coaxial Cable Antenna
8	antenna image	



4. Product specifications

4.1 Product structure parameters

4.11 Product material composition:

Number	Material	Specifications (mm)
1	Coaxial Cable	First generation terminal, wire diameter Ø1.13, wire length 140.4

4.12 Appearance

The product has a good appearance, without scratches, sweat marks, protrusions or other defects that seriously affect the appearance.

4.13 Structural dimensions

Reference product drawings:

Technical drawing of a cable assembly. The drawing shows a cable with a connector at one end and a label '绝缘层' (Insulation Layer) at the other. Dimensions include a total length of 139.7 ± 2 mm, a connector length of 32 ± 0.50 mm, and a cable diameter of 1.13 mm. The drawing is labeled '一代端子/黑色线材' (1st Generation Terminal/Black Wire).



4.2 Electrical performance test

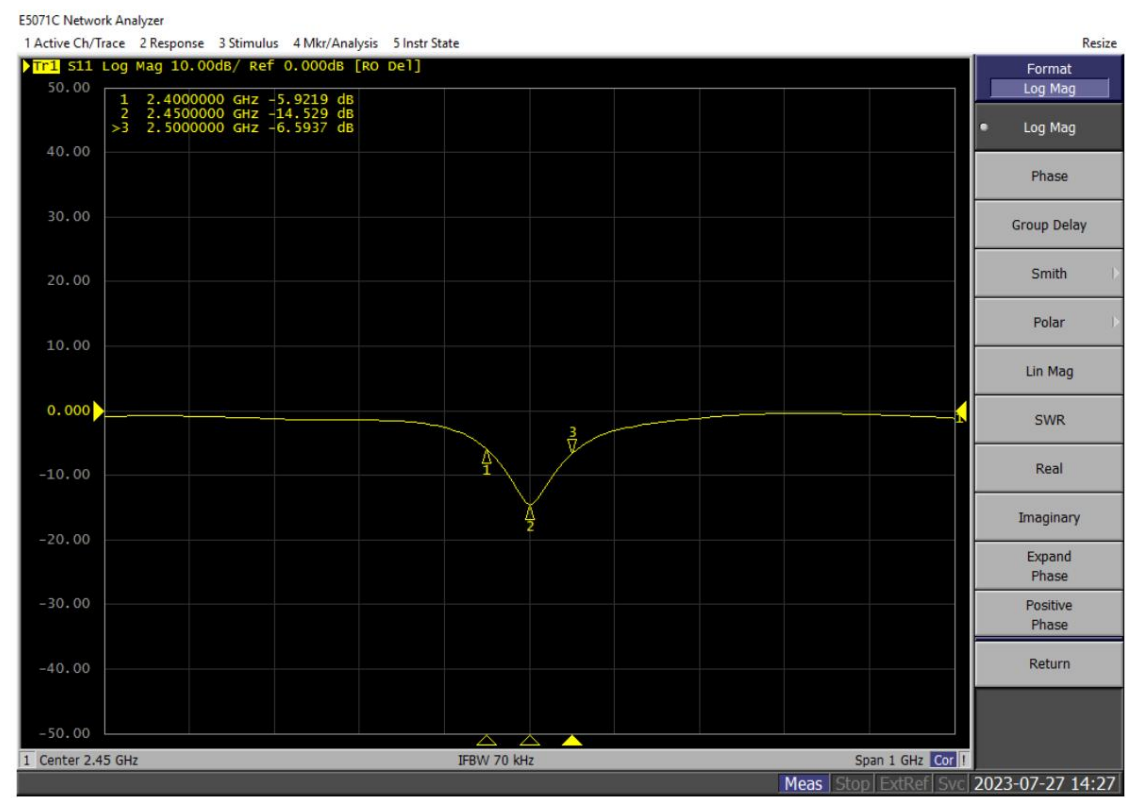
4.21 Test environment and equipment

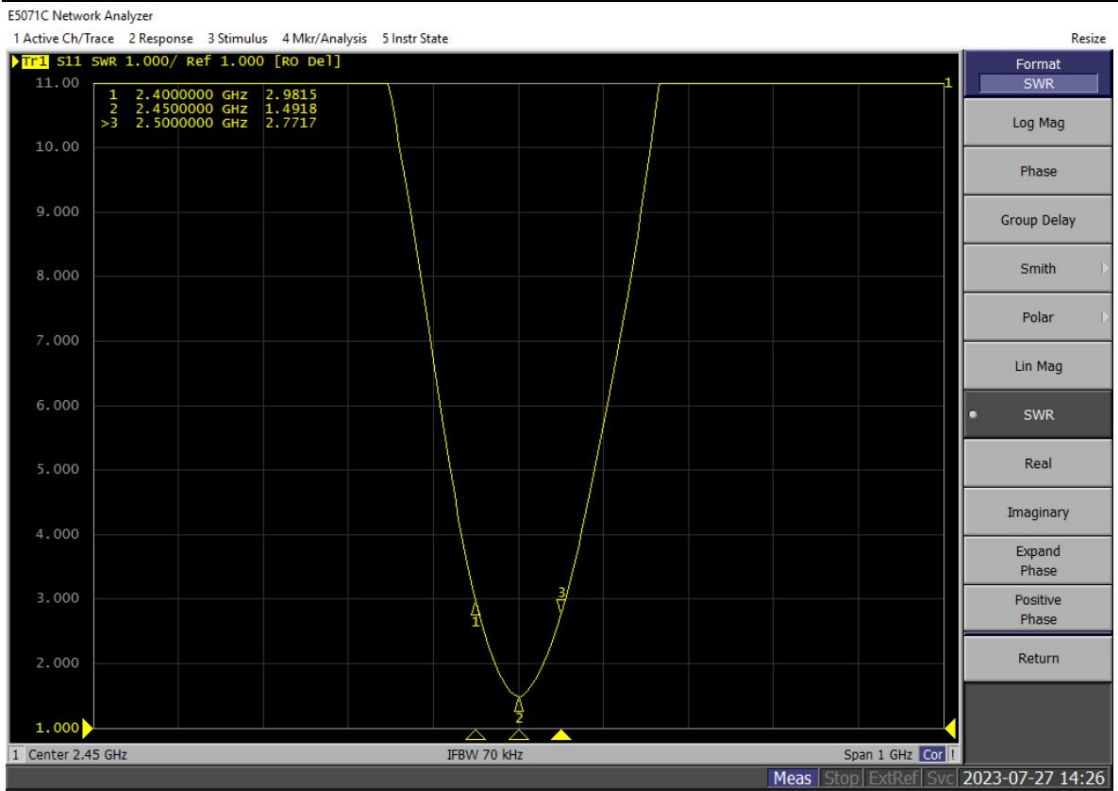
Test environment:	Test equipment:
Temperature: 10°C——+30°C	Network Analyzer
Relativehumidity : ≤80% (+40°C) Atmospheric	KEYSIGHT E5071C
pressure: 750mmkg±30mmkg	Multi-probe microwave anechoic chamber

4.22 Product electrical performance test data:

4.22.1 Product S11 diagram:

Marker	2400MHz	2450MHz	2500MHz
Returnloss	-5.9	-14.5	-6.5
VSWR	2.9	1.4	2.7

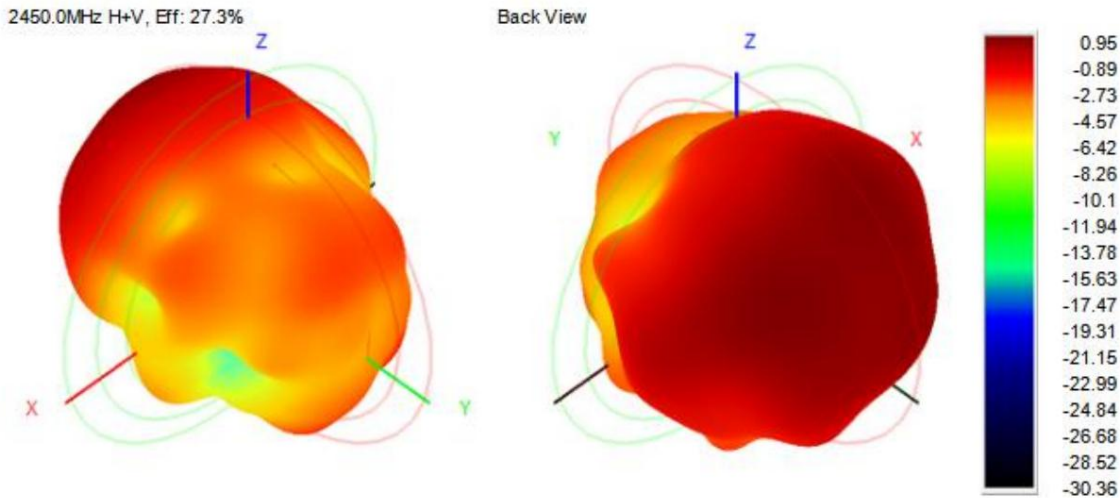




4.22.2 Gain, efficiency and radiation pattern

Frequency (MHz)	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain (dBi)	0.09	0.39	0.65	0.88	0.98	0.95	0.73	0.50	0.16	-0.08	-0.28
Efficiency(%)	23.9	25.2	26.1	26.9	27.2	27.3	26.3	24.3	22.4	20.4	19.4

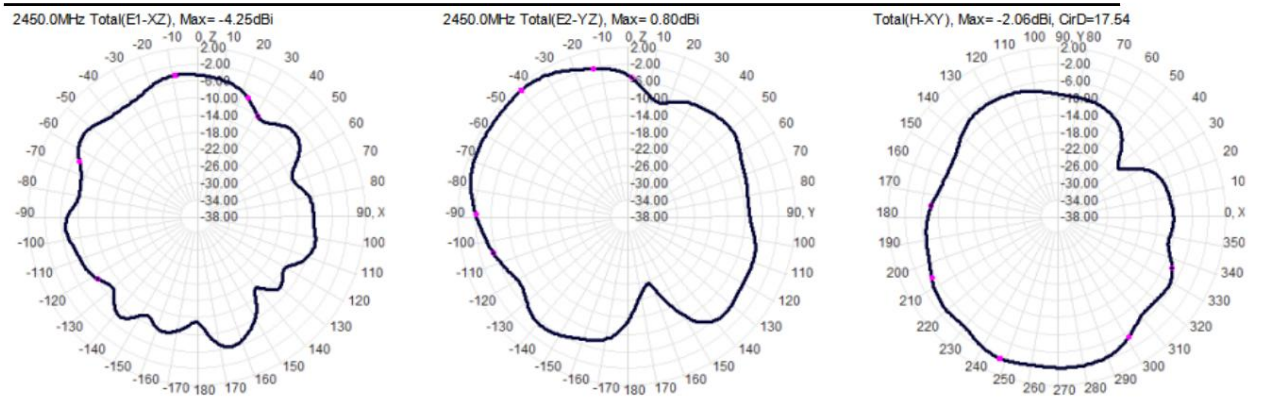
2450MHz Directivity Pattern:





Shenzhen Shuodian Electronic Technology Co.,Ltd

Page number 9-10



5. Product packaging

Packing:

Ziplock bag, 200pcs per bag.



6. Documentation

Document number	
Release Date	2024/01/17
prepared by	Hungjie
Approved by	WH

Revised History

Date	Version	Revised Record
2024/01/17	1.00	New Project