

Antenna Datasheet

Product OC: Y2RSU0HA0CA

Version: 1.0

Date: 2024-09-29

Product Name: WIFI Adhesive FPC Antenna

Key Features:

Frequency Band: 2400–2500 MHz, 5150–5850 MHz

Dimensions: 28.9 mm × 11mm

Efficiency: Up to 52%

RoHS and REACH Compliant

Contents

Contents	2
1 Specification	3
1.1. Electrical	3
1.2. Mechanical & Environmental	3
1.3. Antenna Assembly	4
1.4. Matching Circuit	4
2 Drawing	5
3 Detailed Performance	6
3.1. S-Parameter Test	6
3.1.1. VSWR	6
3.2. Radiation Performance Test	7
3.2.1. Efficiency	7
3.2.1. Peak Gain	8
3.2.2. 2D Radiation Pattern	9
4 Packaging	10
Contact Us	12
Legal Notices	13
Revision History	15

1 Specification

Test Condition: Assembled in test device

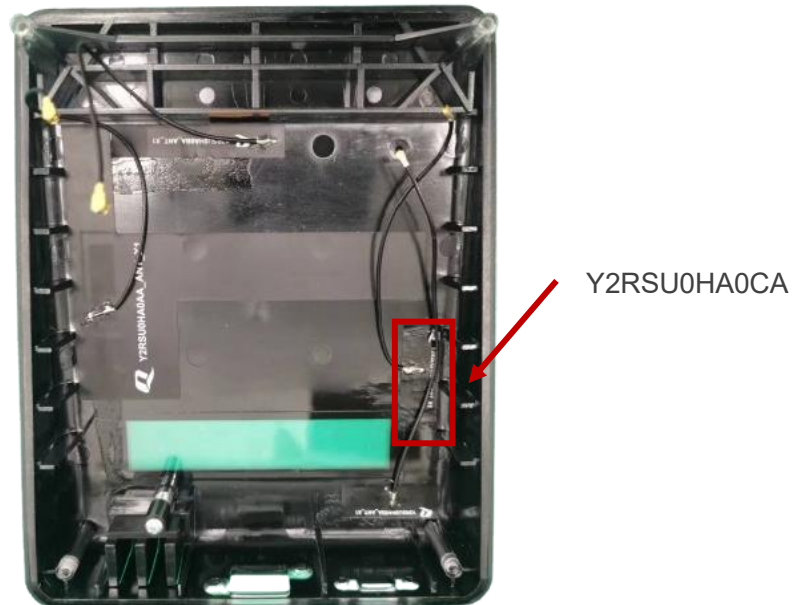
1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz, 5150–5850 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 1.9
Peak Gain	3.6 dBi

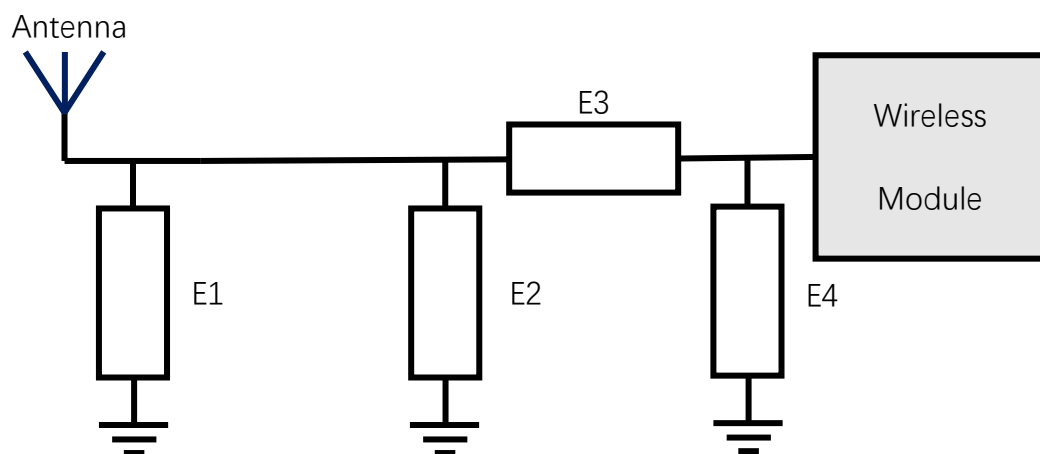
1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	28.9 mm × 11mm
Material & Color	FPC & Black
Connector Type	IPEX MHF 4L
Weight	Typ.0.4 g
Mounting Type	Adhesive
Environmental	
Operation Temperature	-45 °C to +85 °C
Storage Temperature	-45 °C to +85 °C
RoHS & REACH Compliant	Yes

1.3. Antenna Assembly

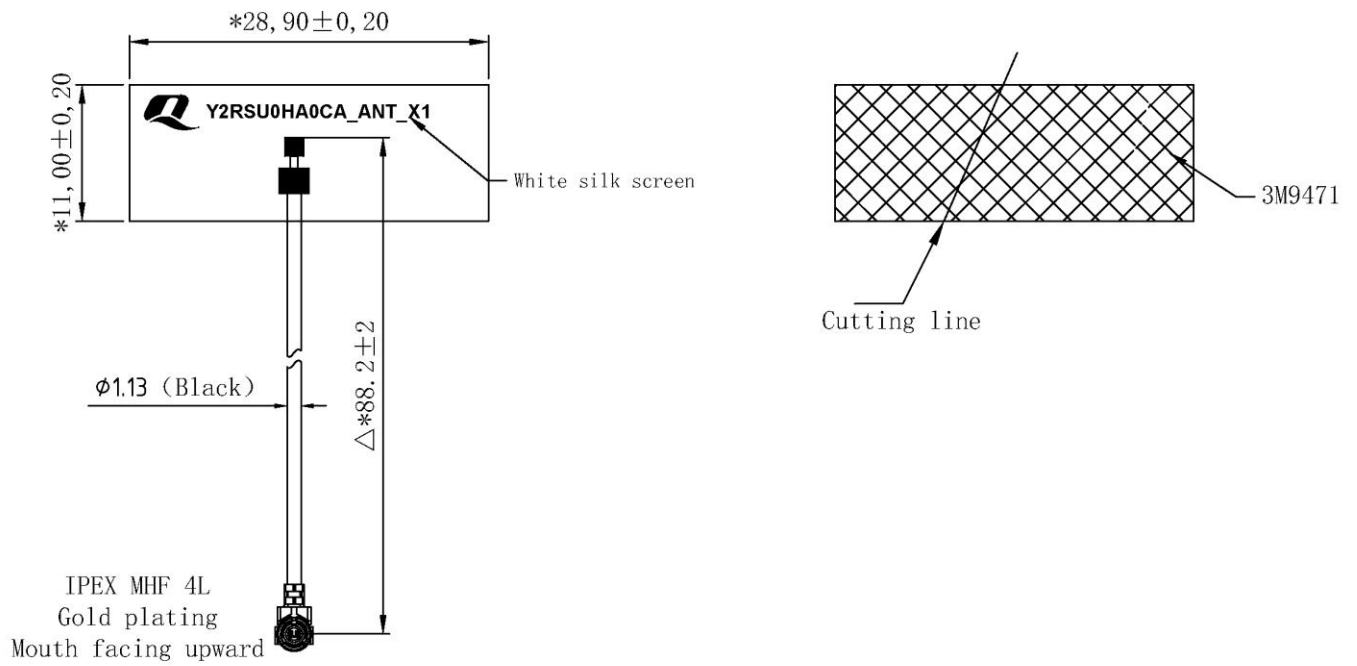


1.4. Matching Circuit



	E1	E2	E3	E4
Default Matching	NA	NA	0 Ω	NA
Tolerance	NA	NA	$\pm 5\%$	NA

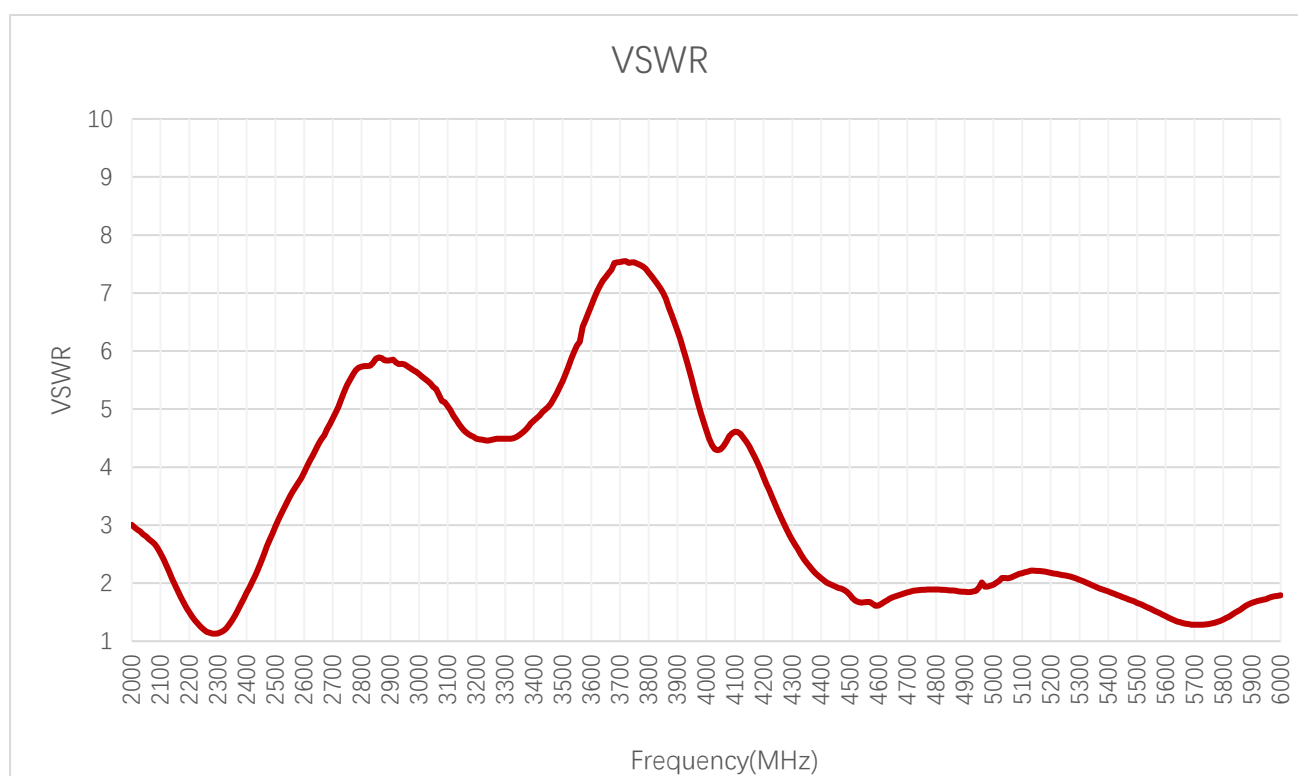
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR

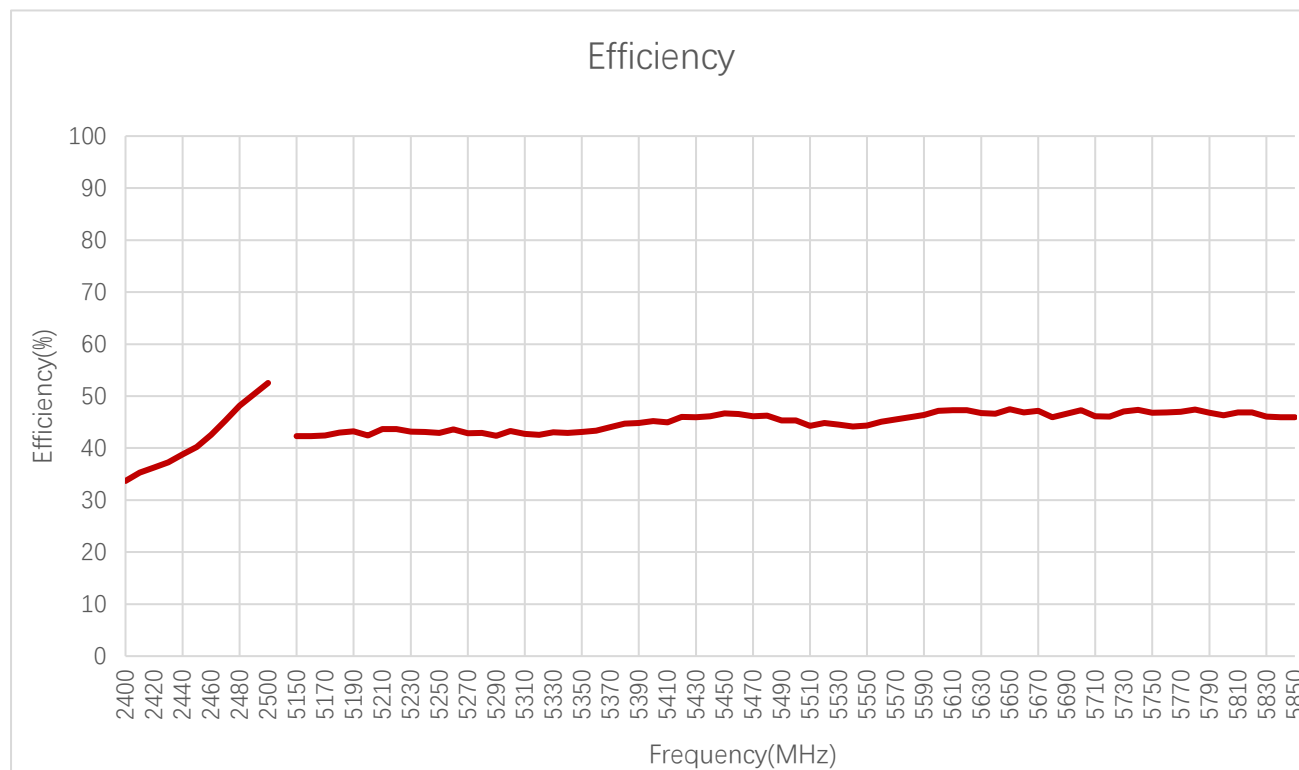


VSWR

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
VSWR	1.8	2.4	3.0	2.2	1.7	1.5	-	-	-

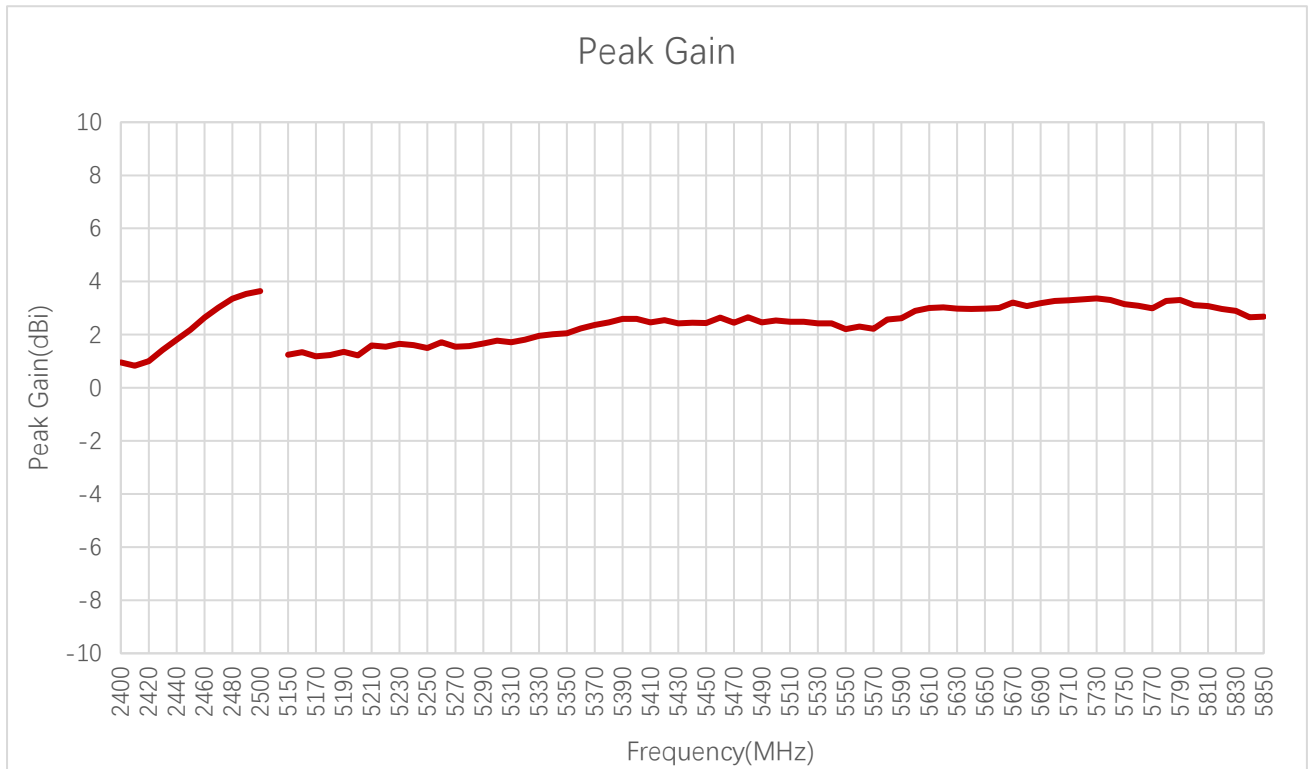
3.2. Radiation Performance Test

3.2.2. Efficiency



Efficiency (%)									
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Efficiency (%)	33.7	40.2	52.5	42.3	45.3	46.0	-	-	-

3.2.1. Peak Gain



Peak Gain (dBi)

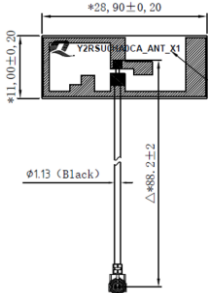
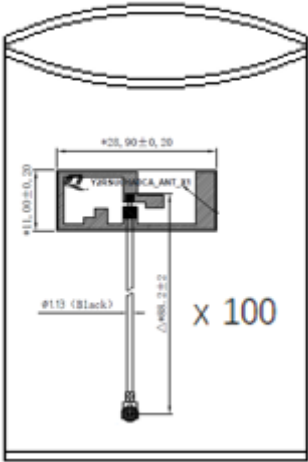
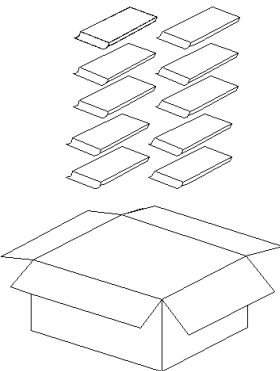
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6525	7125
Peak Gain (dBi)	1.0	2.2	3.6	1.2	2.5	2.7	-	-	-

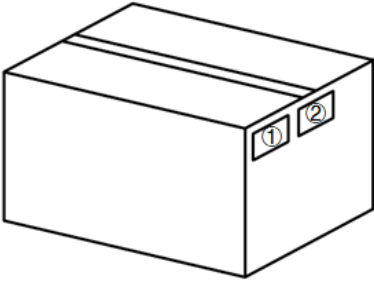
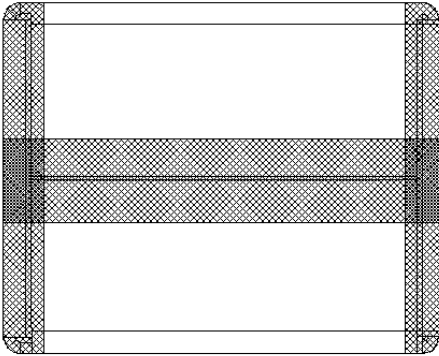
3.2.2. 2D Radiation Pattern

- Test Condition: Assembled in test device
- Test Chamber: HF-G-1



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		Product drawing
2		100 pcs antenna products in a big PE bag (100 PCS Antennas / Big PE Bag)
3		50 PE Bags / Carton Box (5000 PCS Antennas / Carton Box) Estimated quantity Products that cannot fill the entire carton box are packed in a suitable size carton box. <u>Carton Size:</u> <u>L × W × H = 300 × 250 × 200 mm</u>

4		Position for Attaching Labels ① Carton Label ② Quality Label
5		Sealing Cartons “$\perp$” type sealing cartons
Note	The initial packaging method described above is for reference only, and the final actual packaging method shall be subject to the actual shipping packaging.	

Contact Us

At Quectel, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Or our local offices. For more information, please visit:

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Revision History

Version	Date	Author	Note
-	2024-09-29	Omid JI/ Bailey ZHANG/ David LIU/ Aria CHU	Creation of the document
1.0	2024-09-29	Omid JI/ Bailey ZHANG/ David LIU/ Aria CHU	First official release



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