

Antenna Datasheet

Product OC: Y0TCG0CA0AA

Version: 1.0

Date: 2026-05-27

Product Name: WIFI FPC Internal Antenna

Key Features:

Frequency Band: 2400–2500 MHz

Dimensions: 35 mm × 7 mm

RoHS and REACH Compliant

Contents

Contents	1
1 Specification	2
1.1. Electrical	2
1.2. Mechanical & Environmental	3
2 Drawing	4
3 Detailed Performance	5
3.1. S-Parameter Test	5
3.1.1. VSWR	5
3.1.2. Return Loss	6
3.2. Radiation Performance Test	7
3.2.1. Efficiency	7
3.2.2. Average Gain	8
3.2.3. Peak Gain	9
3.2.4. 2D Radiation Pattern	10
4 Packaging	11
Contact Us	13
Legal Notices	14
Revision History	16

1 Specification

Test Condition: Assembled in test device

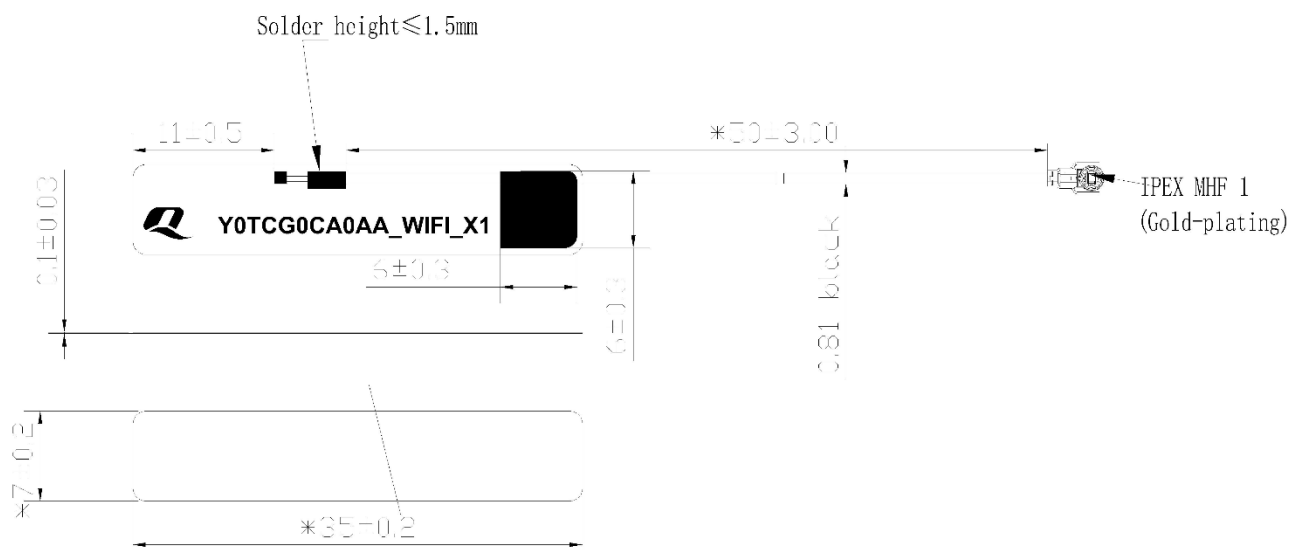
1.1. Electrical

Electrical	
Frequency Range	2400–2500 MHz
Impedance	50 Ω
Polarization	Linear
Radiation Pattern	Omni-directional
VSWR	≤ 5.5
Peak Gain	0.5 dBi

1.2. Mechanical & Environmental

Mechanical	
Antenna Dimensions	35 mm × 7 mm
Material & Color	FPC & Black
Cable Type & Color & Length	Φ 0.81 & Black & 50 mm
Connector Type	IPEX MHF 1
Weight	/
Mounting Type	Adhesive
Environmental	
Operation Temperature	-40 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
RoHS & REACH Compliant	Yes

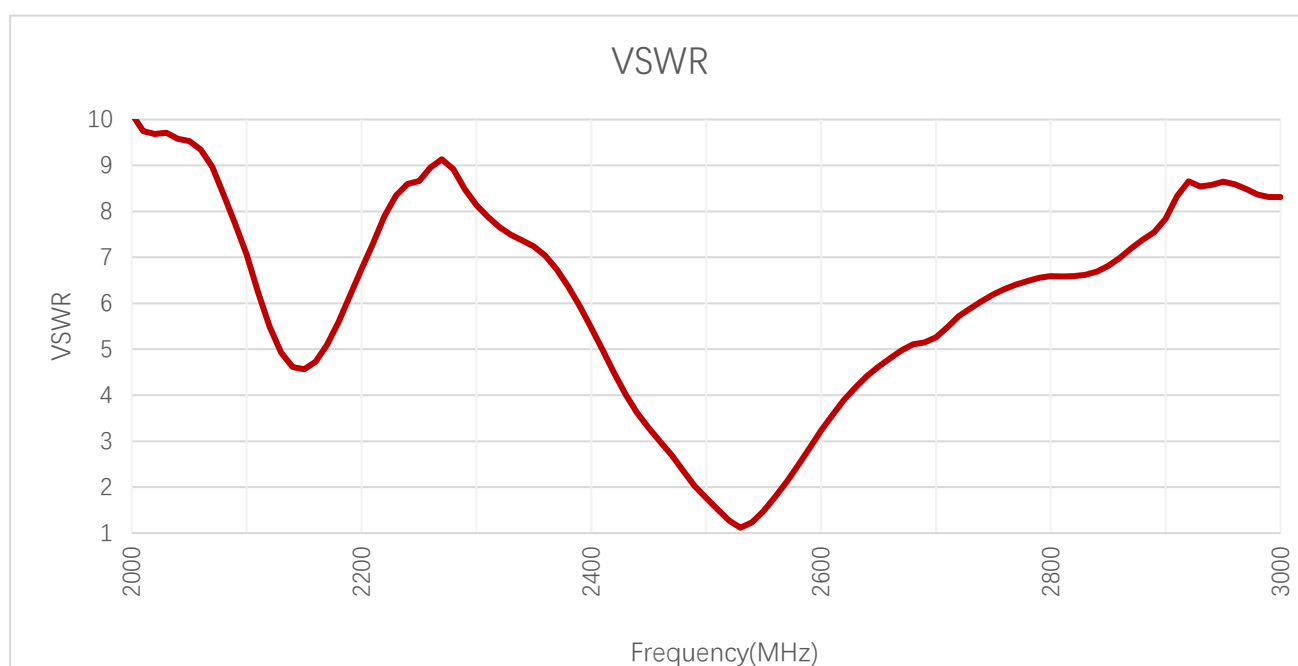
2 Drawing



3 Detailed Performance

3.1. S-Parameter Test

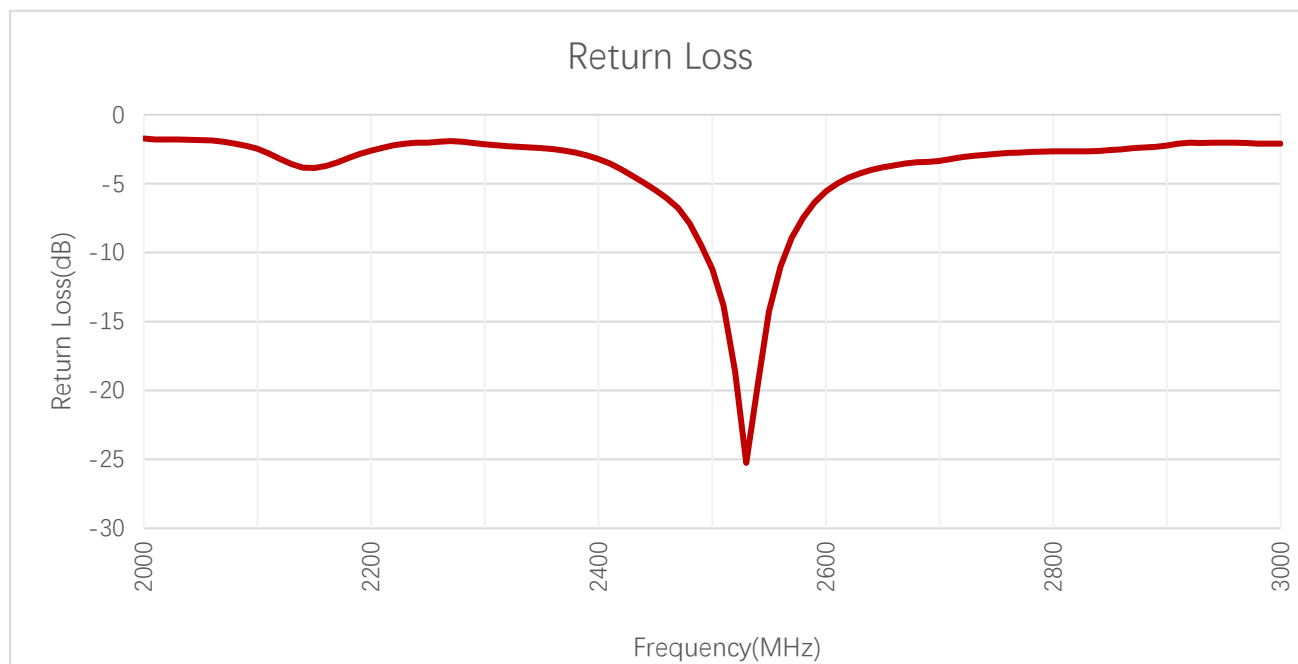
3.1.1. VSWR



VSWR

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
VSWR	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2450	2500	3600	4700	5000	5500	6000
VSWR	-	-	5.5	3.3	1.8	-	-	-	-	-

3.1.2. Return Loss

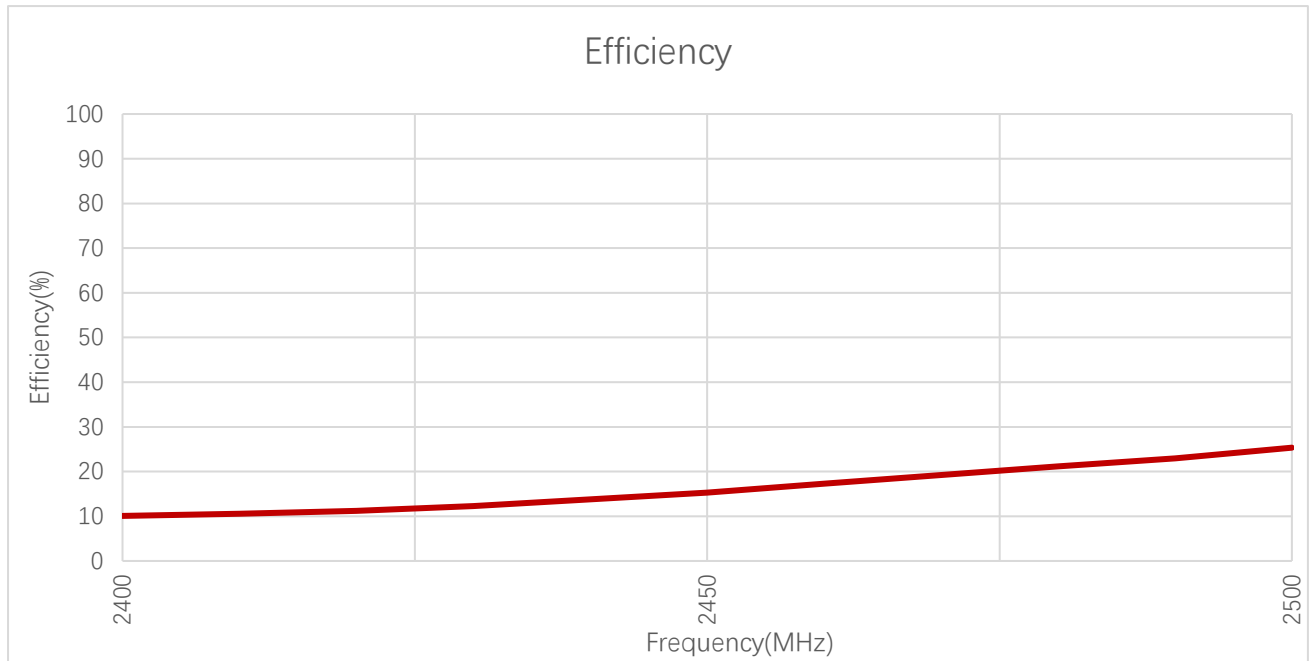


Return Loss (dB)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Return Loss (dB)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2450	2500	3600	4700	5000	5500	6000
Return Loss (dB)	-	-	5.5	3.3	1.8	-	-	-	-	-

3.2. Radiation Performance Test

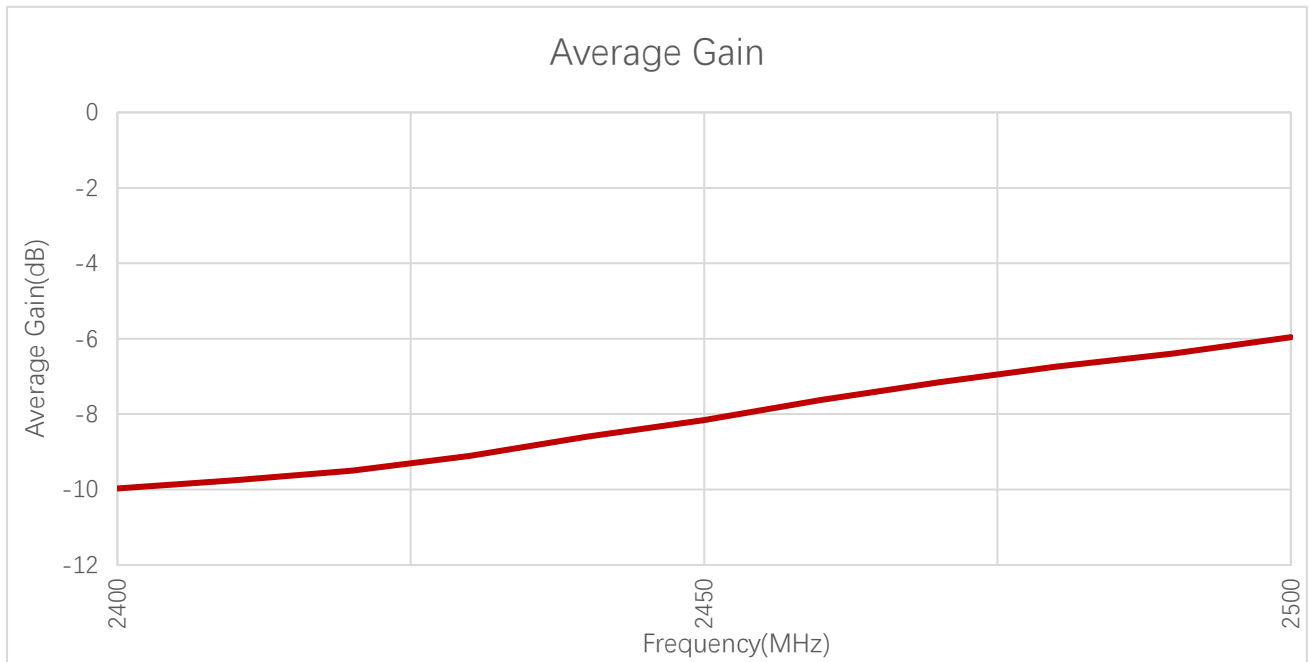
3.2.1. Efficiency



Efficiency (%)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Efficiency (%)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2450	2500	3600	4700	5000	5500	6000
Efficiency (%)	-	-	10.1	15.3	25.4	-	-	-	-	-

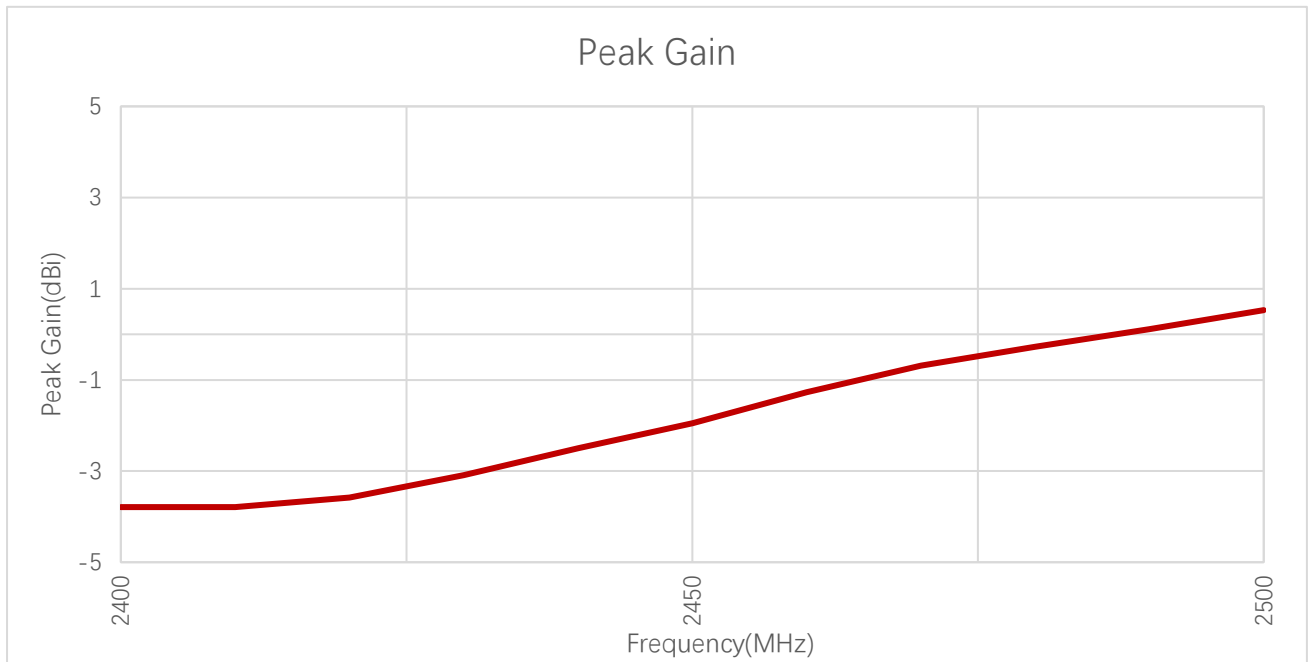
3.2.2. Average Gain



Average Gain (dB)

Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Average Gain (dB)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2450	2500	3600	4700	5000	5500	6000
Average Gain (dB)	-	-	-10.0	-8.2	-6.0	-	-	-	-	-

3.2.3. Peak Gain

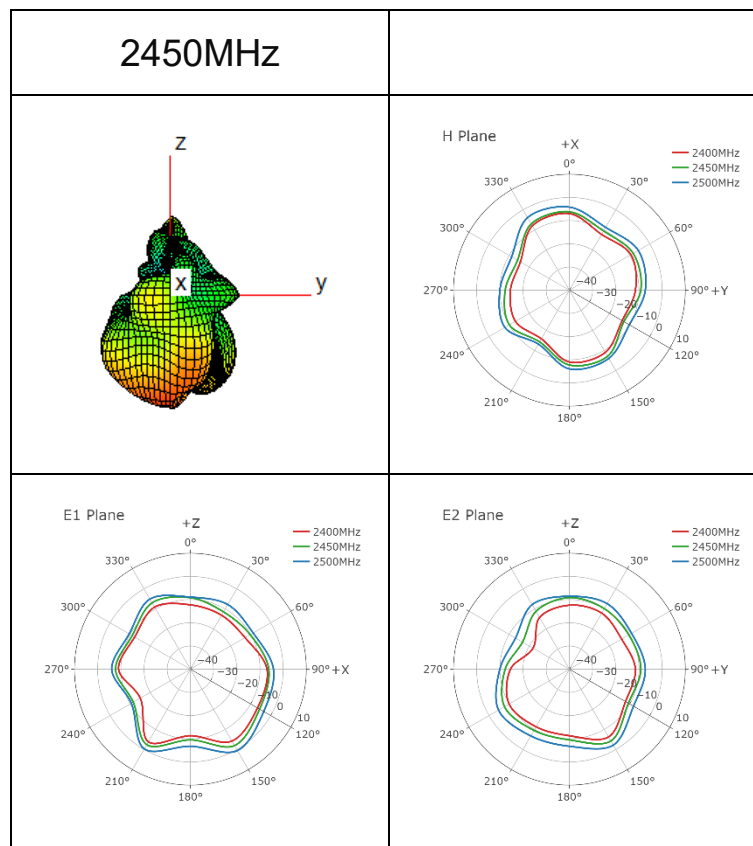


Peak Gain (dBi)

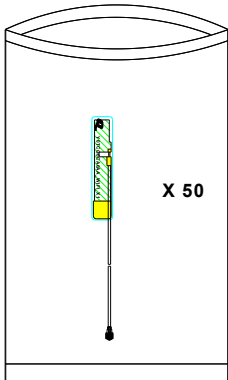
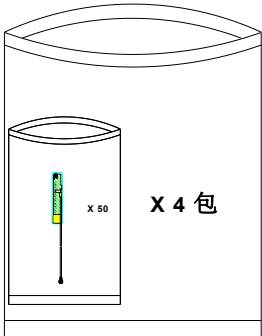
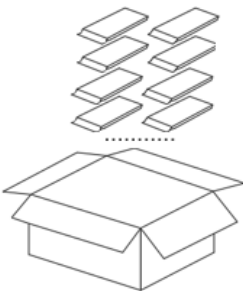
Frequency (MHz)	600	630	710	830	900	960	1440	1710	1740	1880
Peak Gain (dBi)	-	-	-	-	-	-	-	-	-	-
Frequency (MHz)	1950	2140	2400	2450	2500	3600	4700	5000	5500	6000
Peak Gain (dBi)	-	-	-3.8	-2.0	0.5	-	-	-	-	-

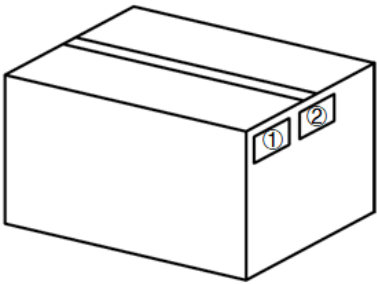
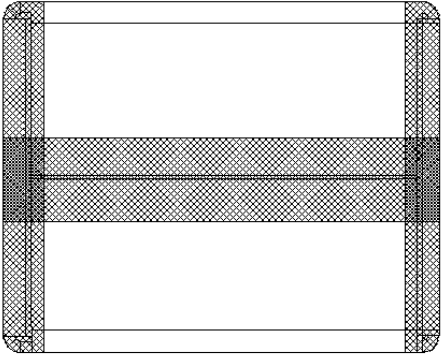
3.2.4. 2D Radiation Pattern

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



4 Packaging

Step	Packaging Picture / 2D Picture	Description
1		Put 50 products into a small PE bag; 50 Antennas per small PE bag
2		Each large PE bag contains totaling 200 products. 100 Antennas per big PE bag
3		(32 PE Bags / Carton Box) (6400 / 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 = 405 × 295 × 185 mm</u>

4		Position for Attaching Labels ① Carton Label ② Quality Label
5		Sealing Cartons H-shaped 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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Revision History

Version	Date	Author	Note
-	2026-05-27	Yuri Qu/ Joye Wang/ Kessie Geng/ Zeline Liang	Creation of the document
1.0	2026-05-27	Yuri Qu/ Joye Wang/ Kessie Geng/ Zeline Liang	First official release



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