

Antenna Datasheet

Product OC: Y2CZS0HA0CA

Version: 1.0

Date: 2025-04-08

Product Name: Wi-Fi Metal Embedded Antenna

Key Features:

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

Dimensions: 26.2mm × 16.6mm × 7.4mm

Efficiency: Up to 48.2%

RoHS and REACH Compliant



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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	≤ 4.1						
Peak Gain	1.5 dBi						

1.2. Mechanical & Environmental

Mechanical						
Antenna Dimensions	26.2mm × 16.6mm × 7.4mm					
Material & Color	SUS304 & Natural					
Cable Type & Color & Length	Ф1.13 & Red & 70mm					
Connector Type	IPEX MHF 1					
Mounting Type	Screw					
Weight	Typ. 1.0 g					
Environmental						
Operation Temperature	-40 °C to +85 °C					
Storage Temperature	-40 °C to +85 °C					
RoHS & REACH Compliant	Yes					

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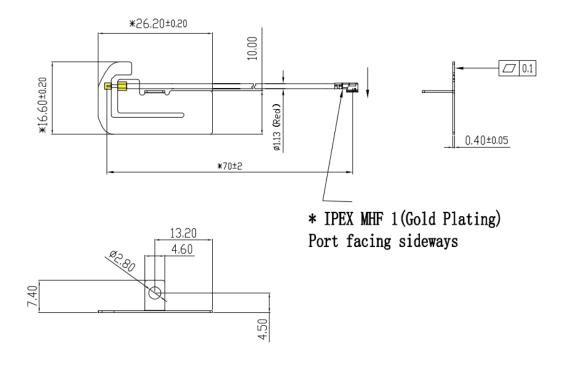
1.3. Antenna Assembly



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2 Drawing



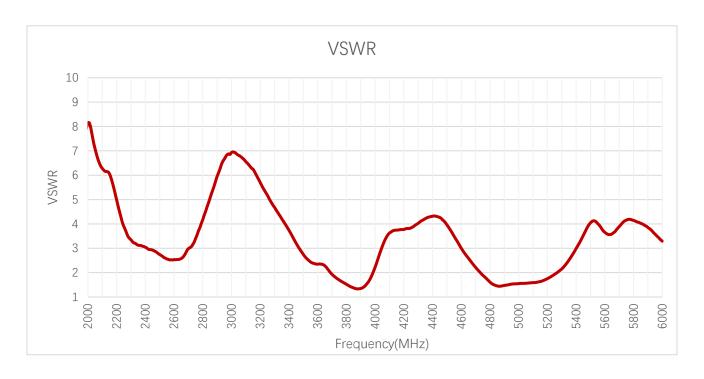
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3 Detailed Performance

3.1. S-Parameter Test

3.1.1. VSWR



VSWR

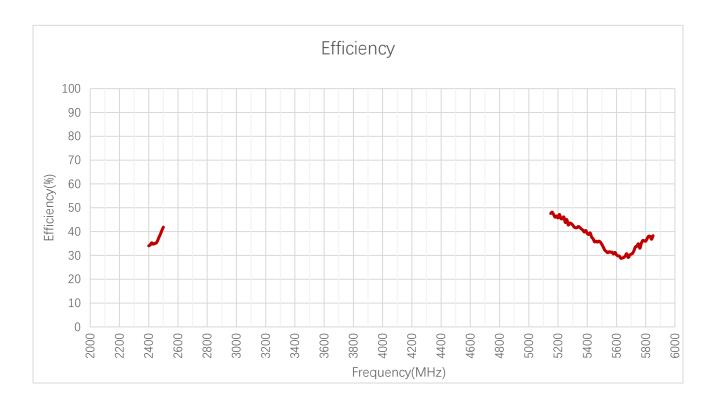
Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
VSWR	3	2.9	2.7	1.6	4	4	-	-	-	-

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3.2. Radiation Performance Test

3.2.1. Efficiency



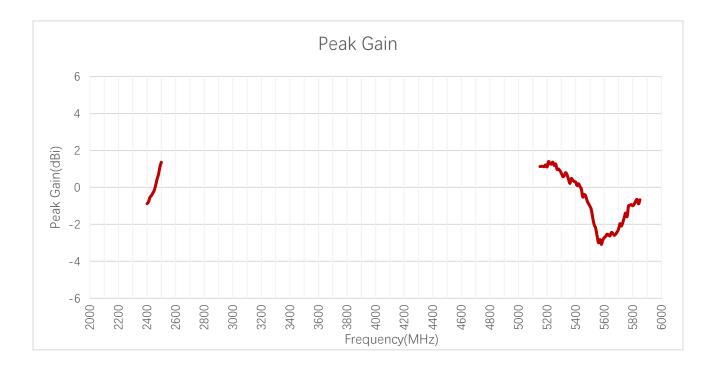
Efficiency (%)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Efficiency (%)	34.0	35.2	41.9	47.6	34.6	38.3	-	-	-	-

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3.2.2. Peak Gain



Peak Gain (dBi)

Frequency (MHz)	2400	2450	2500	5150	5500	5850	5925	6325	6725	7125
Peak Gain (dBi)	-0.9	-0.2	1.4	1.1	-1	-0.7	-	-	-	-

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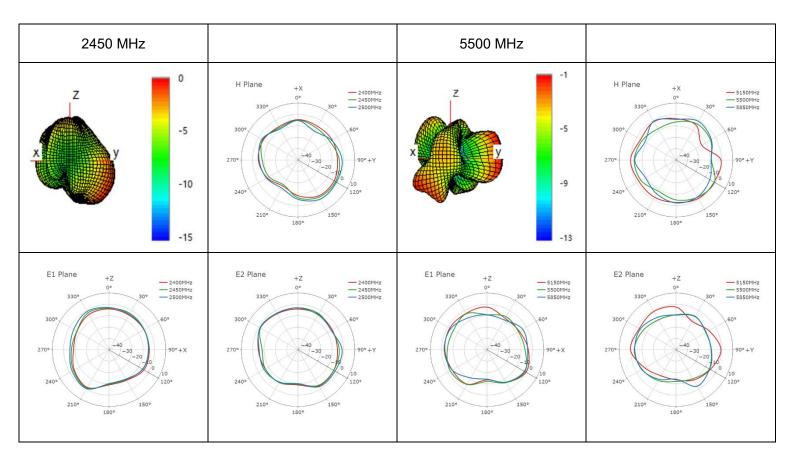


3.2.3. 2D Radiation Pattern

• Test Condition: Assembled in test device

• Test Chamber: GL-G-1





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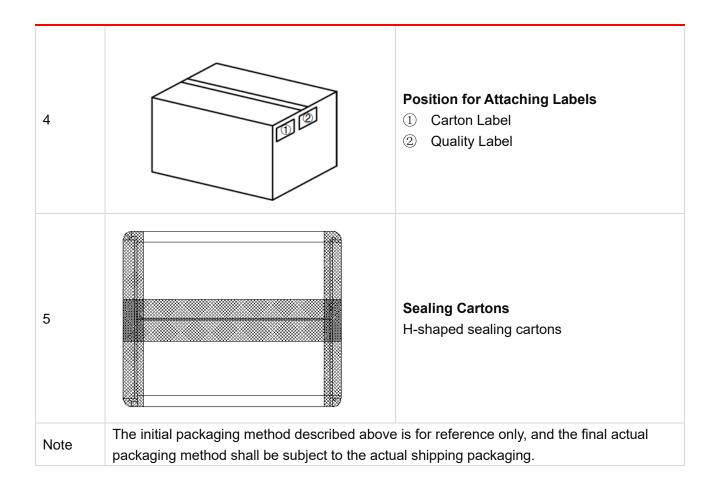


4 Packaging

Step	Packaging Picture / 2D Picture	Description
1	10 PCS / bag	10 pcs antenna products in a PE bag Terminals are wrapped with EPE foam
2	WAST-Long WAST-L	Put the product in the knife card slot, 4 PE bags in each card slot 240 pcs antenna products on a layer.
3		Stack 2 layers of knife cards (480 PCS Antennas / Carton Box) Products that cannot fill the entire carton box are packed in a suitable size carton box. Carton Size: L × W × H = 550 × 350 × 210 mm

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Contact Us

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Revision History

Version	Date	Author	Note
-	2025-04-08	Tina GAN/ Lucky FENG/ Riva REN/ Rainey LIAO	Creation of the document
1.0	2025-04-08	Tina GAN/ Lucky FENG/ Riva REN/ Rainey LIAO	First official release

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