

Rubber Duck Antenna **AC101**



Datasheet
V 1.0.0



Version Note

Version	Details	Contributor(s)	Date	Notes
1.0.0	First edit	Michelle	2026.03.06	

Part Number

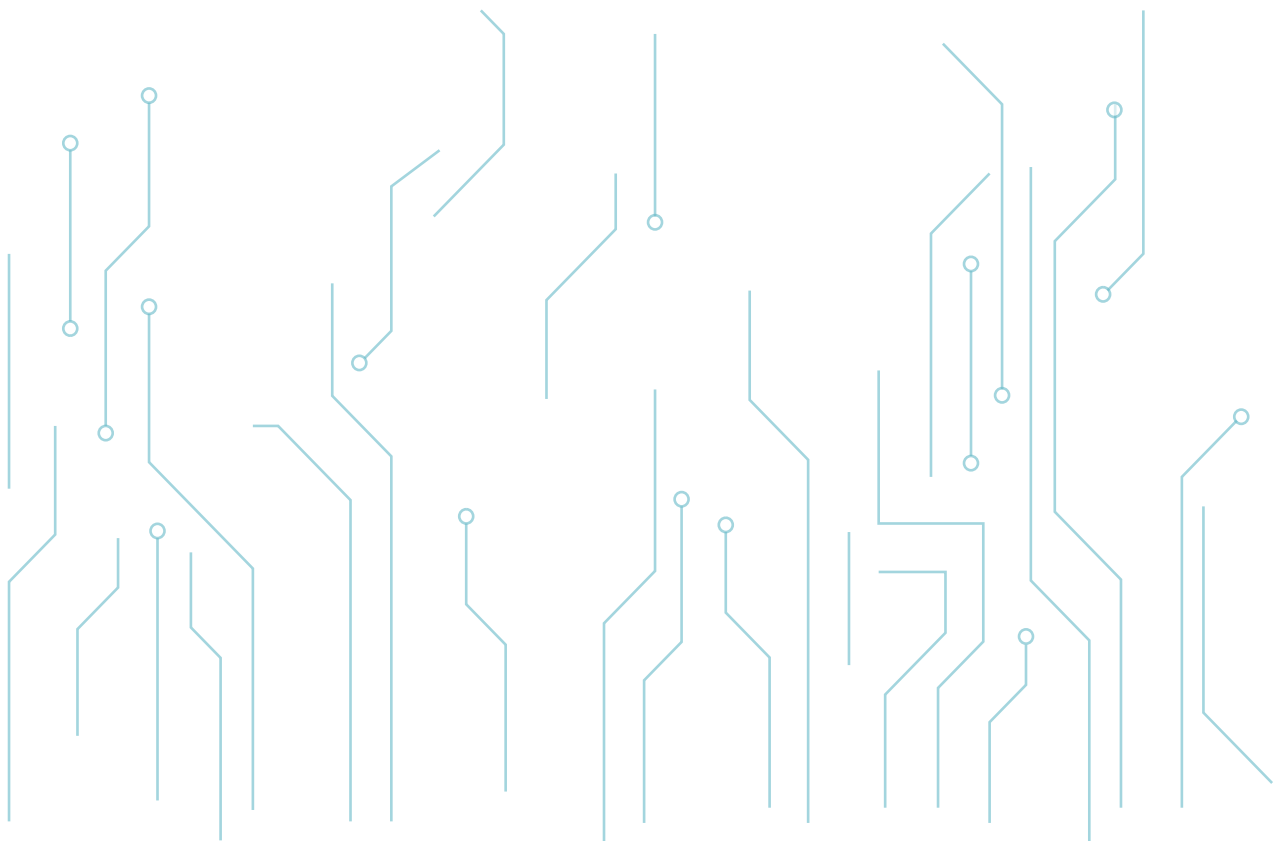
Model	Hardware Code
AC101	-

Click the icon to view and download the latest product documents electronically.
https://en.minewsemi.com/file/AC101_Datasheet_EN.pdf



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1 PRODUCT OVERVIEW

1.1 Overview

AC101 is a dual-band foldable rubber rod antenna compliant with ROHS standards. It withstands temperatures ranging from -30°C to +80°C and has passed multiple reliability tests including vibration and drop tests, ensuring stable performance.



1.2 Product Features

- Dual-band coverage for enhanced stability: Omnidirectional radiation and vertical polarization design ensures precise coverage across both mainstream frequency bands. Uniform signal distribution eliminates gaps in coverage and minimizes dead zones, delivering broader adaptability.
- Enhanced gain efficiency: Peak gain reaches 5.33 dBi, with maximum efficiency of 73.11% across the entire frequency band, delivering superior signal transmission distance and stability.
- Compliance is guaranteed: Strictly conforms to the ROHS 2015/863/EU environmental standards.

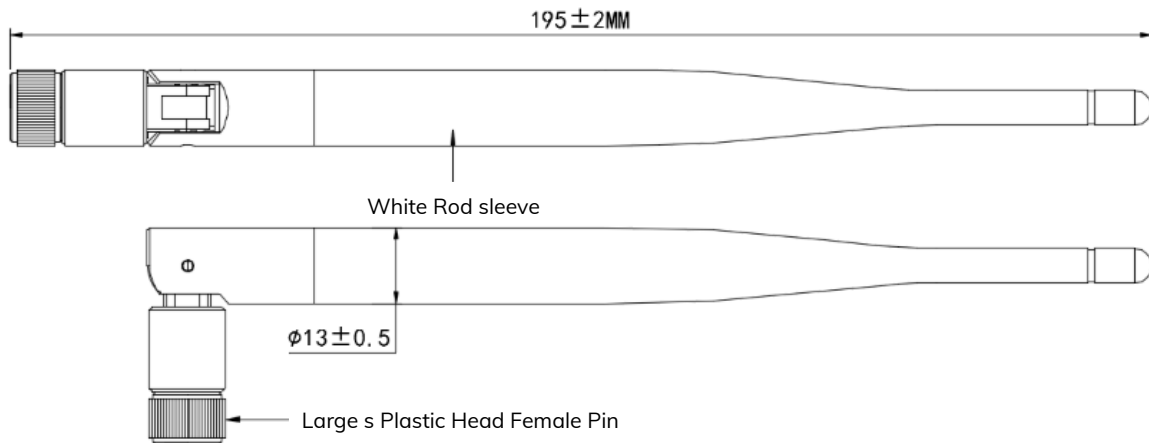
1.3 Electrical Properties and Mechanical Properties

Electrical Specifications	
Frequency Range	2400-2500MHz/5000-5800MHz
VSWR	≤2.5
GAIN	≤5.33 dBi
Radiation	OMNI
Polarization	LINEAR
Input Impedance	50 Ω

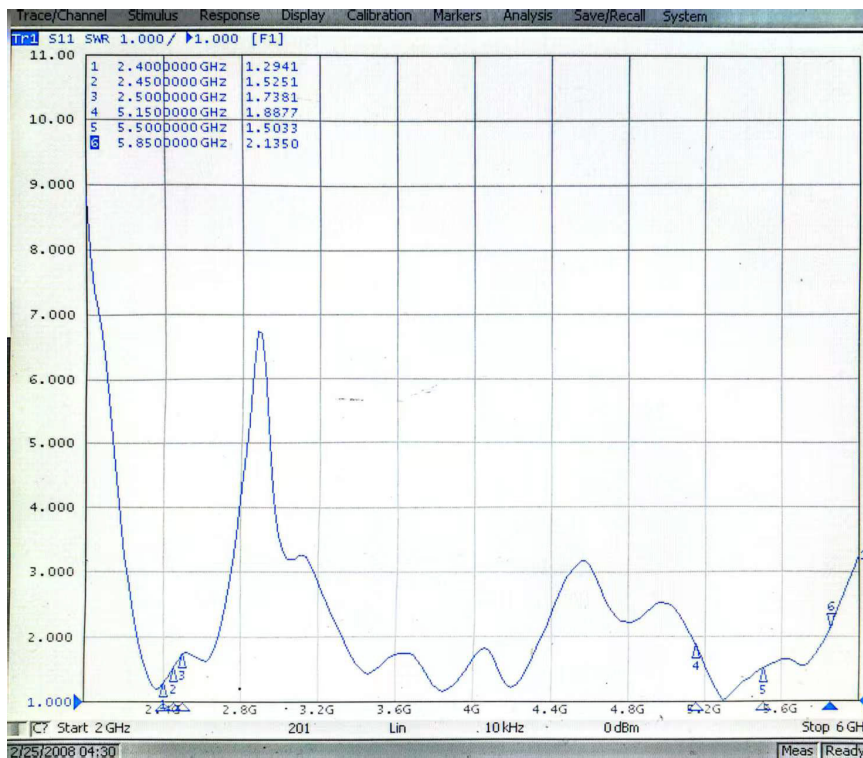
Mechanical Specifications

Input connector	SMAJ
Antenna material	ABS & COPPER
Working Temperature	-30°C ~ +80°C
Working Humidity	40~85%
Weight	17g±1g

2 ANTENNA STRUCTURE DIMENSIONS



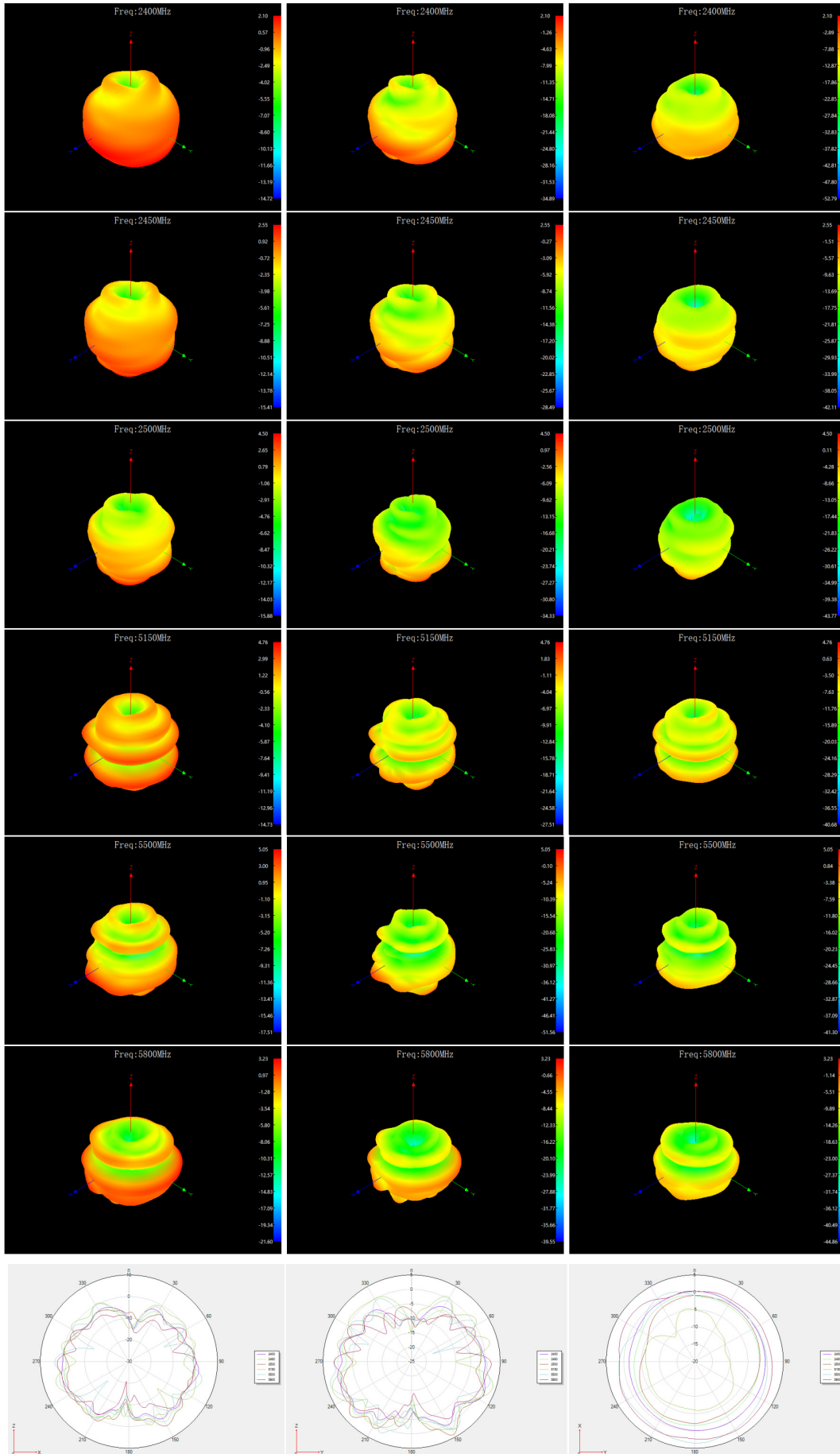
3 PASSIVE TEST DATA






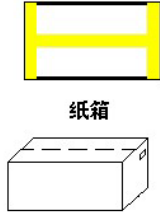
4 GAIN EFFICIENCY TEST DATA

Frequency/MHz	Efficiency / %	MaxGain/dBi
2400	64.86	2.1
2410	63.68	2.26
2420	64.27	1.98
2430	68.39	1.89
2440	71.78	3.34
2450	62.66	2.55
2460	65.16	3.59
2470	52.97	3.14
2480	59.02	3.99
2490	56.23	4.33
2500	54.08	4.5
5150	69.66	4.76
5200	71.94	4.73
5250	69.66	4.47
5300	68.39	4.5
5350	73.11	5.33
5400	64.42	5.27
5450	56.36	4.87
5500	60.12	5.05
5550	66.53	4.97
5600	54.83	3.56
5650	61.24	3.94
5700	60.81	3.73
5750	63.68	4.06
5800	59.16	3.23

5 DIRECTION DIAGRAM



6 PACKAGING INFORMATION

Products	Packaging 1	Packaging 2	Shipping cartons
	 PE袋	 PE袋	 纸箱
Rubber Duck Antenna	1PCS/bag	50PCS/bag	20 bags / carton

7 QUALITY

Cognizant of our commitment to quality, we operate our own factory equipped with state-of-the-art production facilities and a meticulous quality management system. We hold certifications for ISO9001, ISO14001, ISO27001, OHSA18001, BSCI.

Every product undergoes stringent testing, including transmit power, sensitivity, power consumption, stability, and aging tests. Our fully automated module production line is now in full operation, boasting a production capacity in the millions, capable of meeting high-volume production demands.

8 COPYRIGHT STATEMENT

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SHENZHEN MINEWSEMI CO., LTD.

-  0086-755-2801 0353
-  <https://minewsemi.com>
-  minewsemi@minew.com
-  <https://store.minewsemi.com>
-  Gangzhihong Technology Park, Qinglong Road, Longhua District, Shenzhen