

Rubber Duck Antenna **AM101**



Datasheet
V 1.0.0



Version Note

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

Part Number

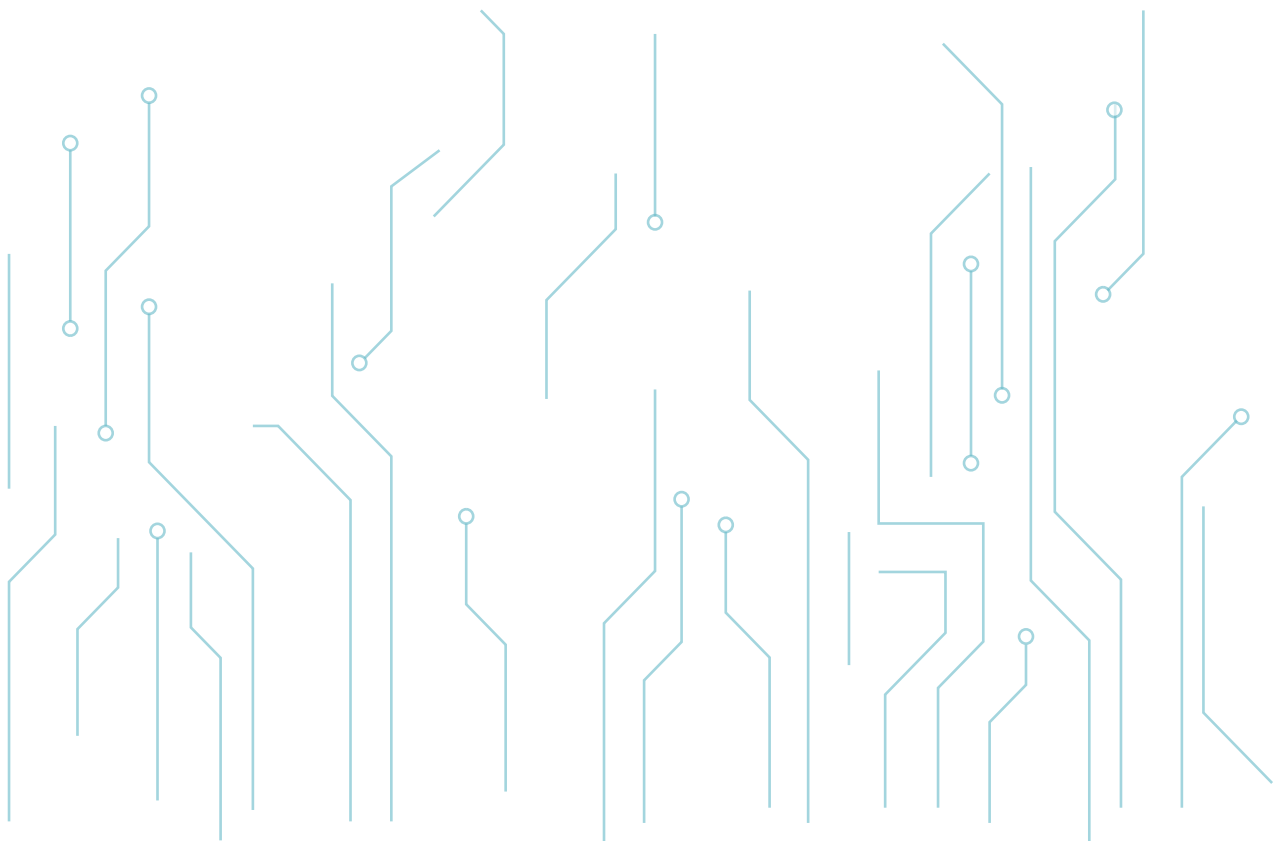
Model	Hardware Code
AM101	-

Click the icon to view and download the latest product documents electronically.
https://en.minewsemi.com/file/AM101_Datasheet_EN.pdf



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1 PRODUCT OVERVIEW

1.1 Overview

AM101 is a premium product engineered for high-frequency wireless communication scenarios, supporting the core frequency band of 5000-5800MHz and compliant with RoHS 2015/863/EU environmental standards. Featuring an SMAJ universal interface and constructed from ABS + high-conductivity copper material, it incorporates a foldable design with precise dimensions of 195±2mm. This combination ensures both portability and robustness. Having undergone rigorous end-to-end testing, it serves as a cost-effective communication solution for IoT, wireless surveillance, high-frequency data transmission, and similar applications.



1.2 Product Features

- Maximized high-frequency performance: Covers a wide 5000-5800MHz bandwidth with a voltage standing wave ratio (VSWR) ≤ 2.5 . Achieves up to 4.56dBi gain and a peak efficiency of 77.09%. Features omnidirectional radiation with vertical polarization design for seamless signal coverage and stable, efficient transmission.
- Compliance is guaranteed: Strictly conforms to the ROHS 2015/863/EU environmental standards.

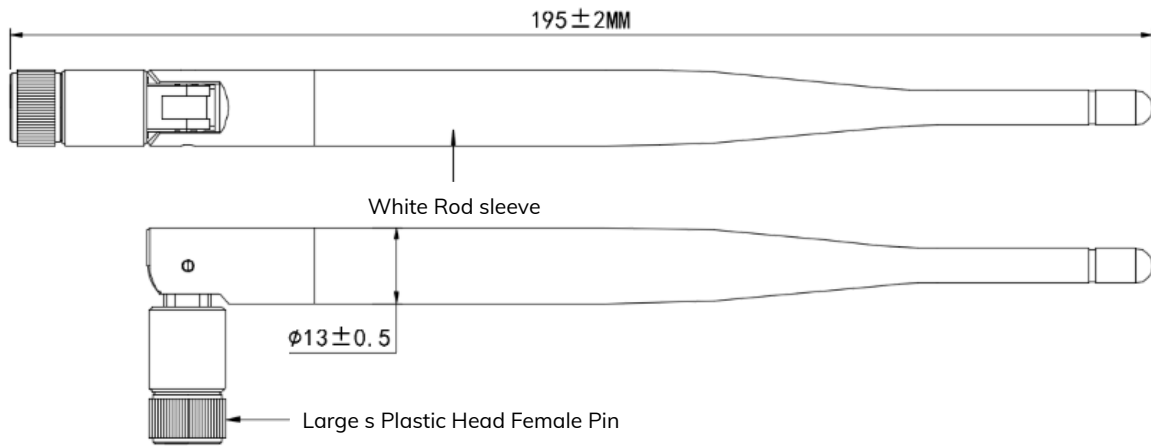
1.3 Electrical Properties and Mechanical Properties

Electrical Specifications	
Frequency Range	5000-5800MHz
VSWR	≤ 2.5
GAIN	≤ 4.56 dBi
Radiation	OMNI
Polarization	LINEAR
Input Impedance	50 Ω

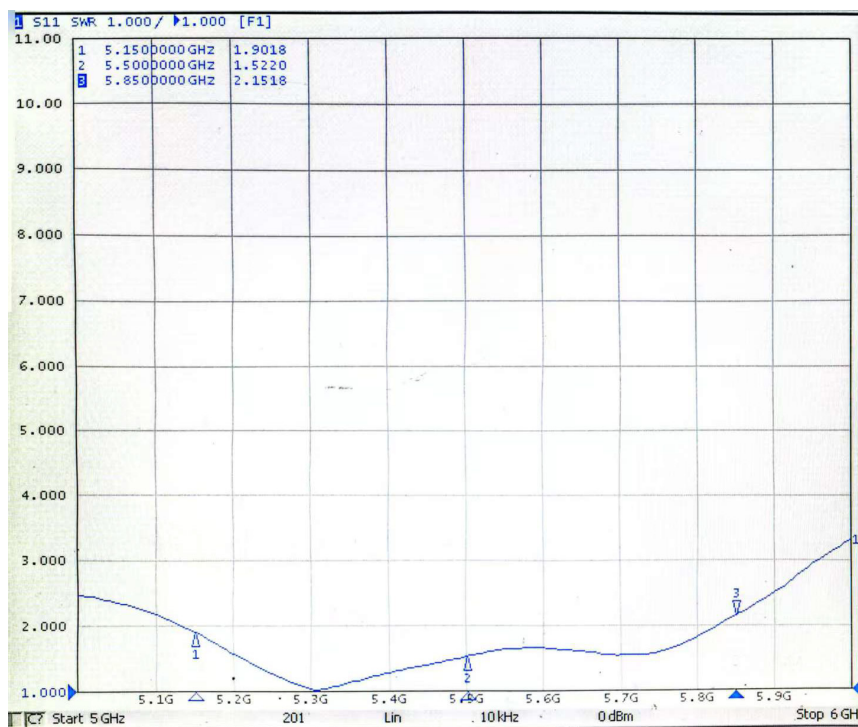
Mechanical Specifications

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

2 ANTENNA STRUCTURE DIMENSIONS



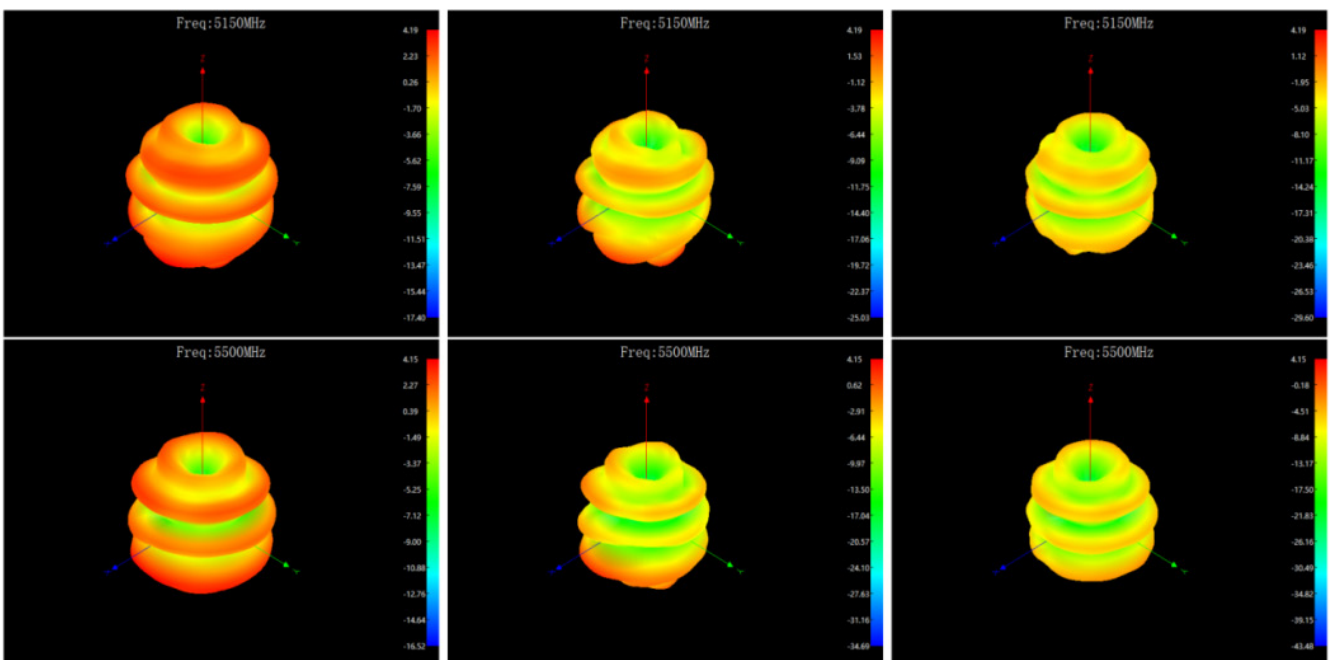
3 PASSIVE TEST DATA

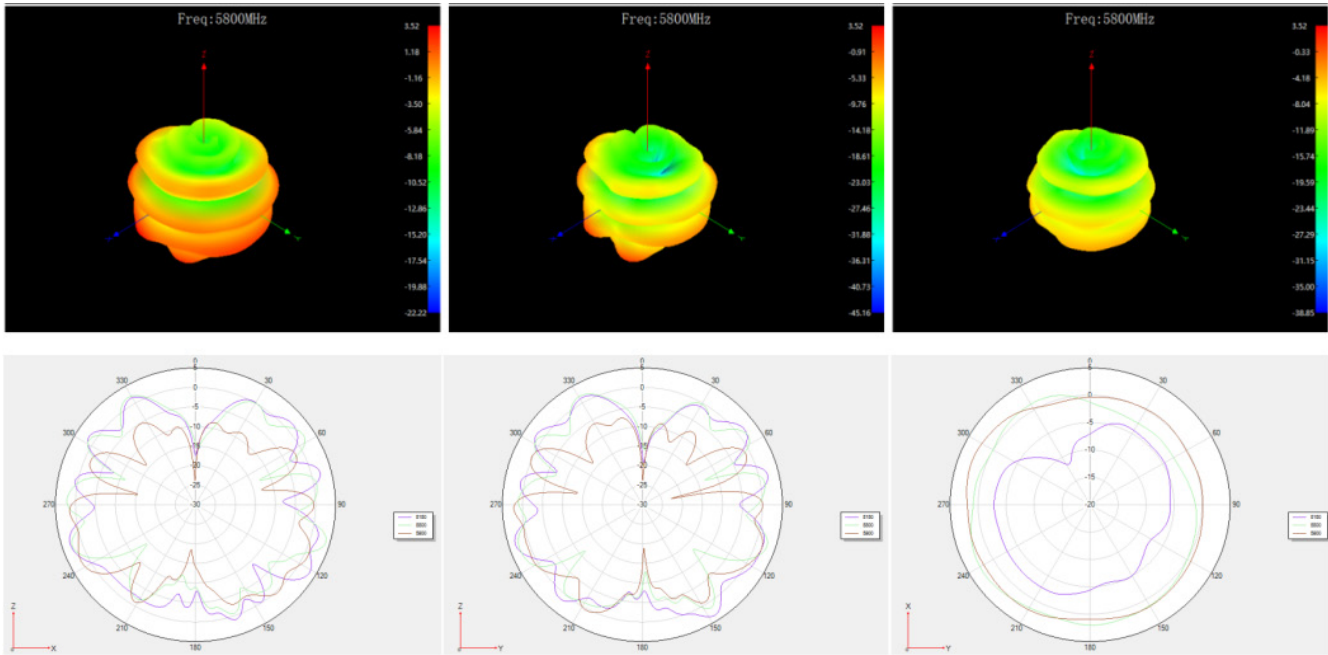


4 GAIN EFFICIENCY TEST DATA



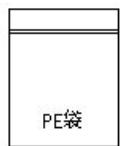
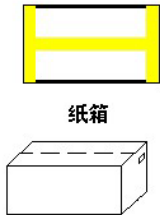
Frequency/MHz	Efficiency / %	MaxGain/dBi
5150	70.96	4.19
5200	72.44	3.86
5250	73.28	3.73
5300	72.44	3.81
5350	77.09	4.3
5400	70.47	4.28
5450	62.66	4.05
5500	64.27	4.15
5550	67.3	4.45
5600	54.58	3.73
5650	58.08	4.12
5700	56.1	4.06
5750	58.48	4.56
5800	55.72	3.52

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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