

Antenna

YKE00A0AA Datasheet

Antenna Services

Version: 1.0

Date: 2021-06-11

Status: Released



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About the Document

Revision History

Version	Date	Author	Note
-	2021-06-11	Kenny YIN/ Aria CHU	Creation of the document
1.0	2021-06-11	Kenny YIN/ Aria CHU	First official release

Contents

About the Document.....	3
Contents	4
1 Product Description.....	5
2 Product Features	5
3 Product Specifications	6
4 Overall Performance	7
4.1. Test Environment	7
4.2. VSWR.....	8
4.3. Efficiency	9
4.4. Gain.....	9
4.5. Radiation Pattern	10
4.5.1. 1575 MHz	11
4.5.2. 1602 MHz	12
4.6. Reference Reflow Temperature	13
5 Product Size	14
5.1. Silk Screen: Top View	14
6 Package.....	15

1 Product Description

The antenna is designed for superior performance, and can be widely used for wireless applications.

We provide comprehensive antenna design support such as simulation, testing and manufacturing for custom antenna solutions to meet your specific application needs.

2 Product Features

- GNSS
- High efficiency
- Excellent performance



3 Product Specifications

Passive Electrical Specifications

Frequency Range	1575.42 $\pm$ 3 MHz; 1602 $\pm$ 3 MHz
Input Impedence	50 Ω
VSWR	$\leq$ 2.0
Gain	$\geq$ 1.0 dBi
Polarization Type	RHCP

Mechanical Specifications

Antenna Size	18.4 mm $\times$ 18.4 mm $\times$ 4 mm
Casing	Ceramics
Connector Type	SMD
Working Temperature	-40 $^{\circ}$ C to +85 $^{\circ}$ C
Radome Color	-

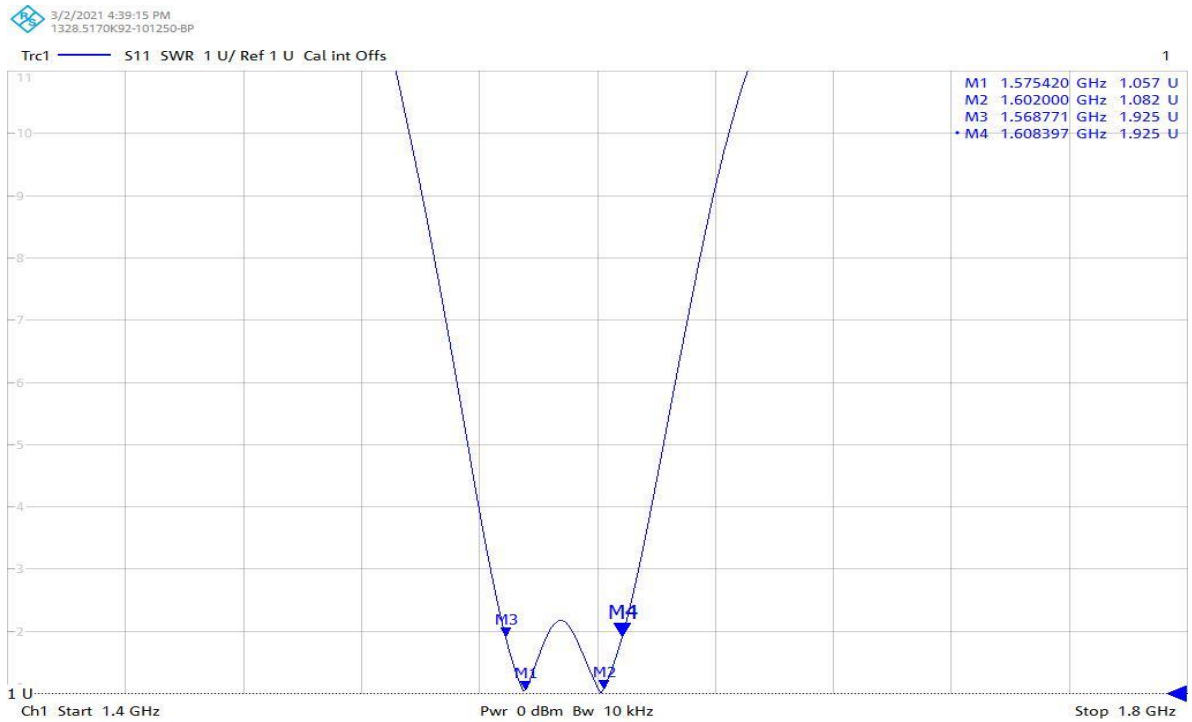
4 Overall Performance

4.1. Test Environment

- KEYSIGHT VNA Network Analyzer E5063A 100 kHz – 8.5 GHz
- RayZone® 2800 Chamber 5G (FR1) SISO/MIMO, 400 MHz – 8.0 GHz

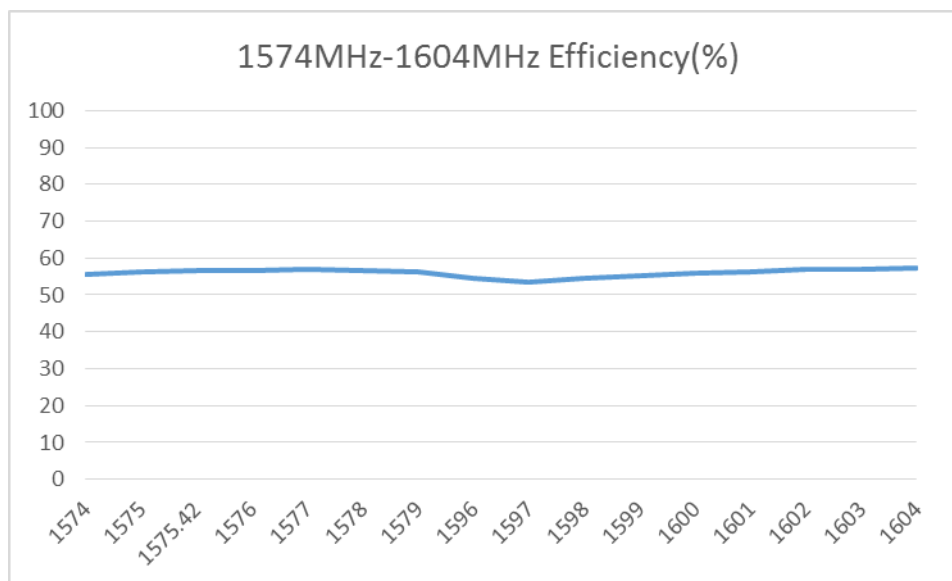


4.2. VSWR



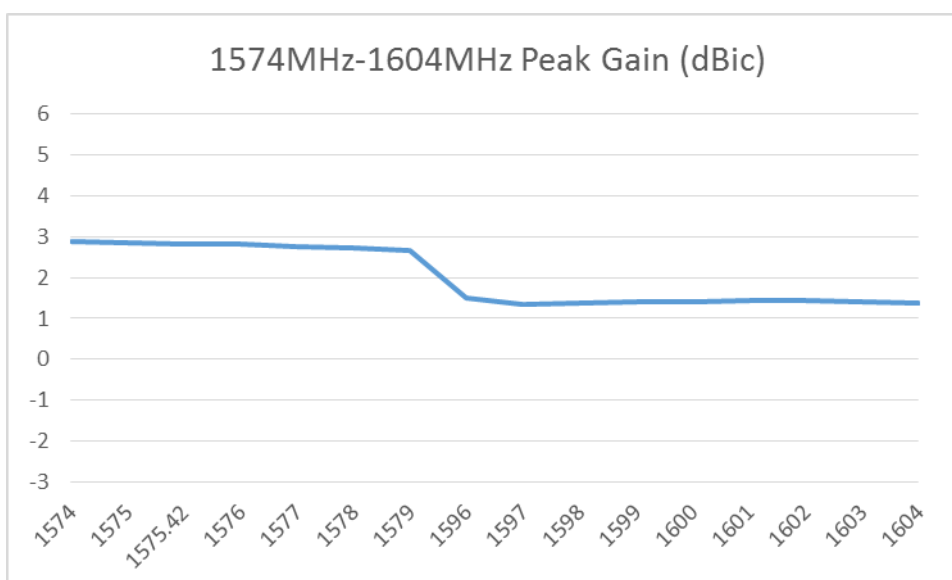
Frequency (MHz)	1575.42	1602
VSWR	1.05	1.08

4.3. Efficiency



Frequency (MHz)	1575.42	1602
Efficiency (%)	56.54	56.89

4.4. Gain



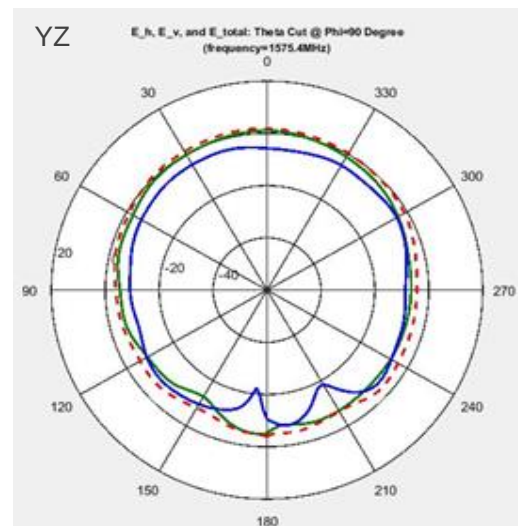
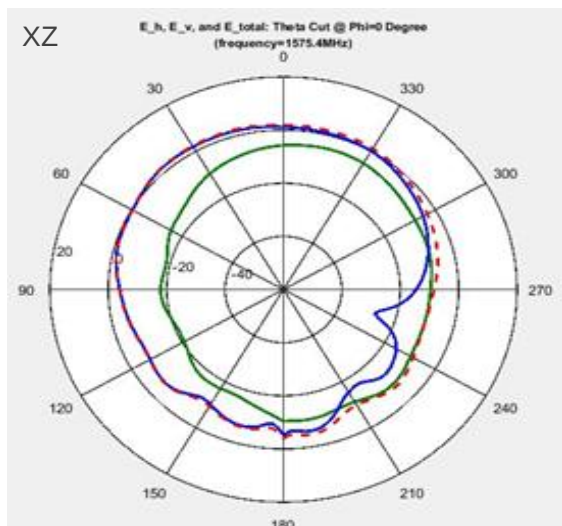
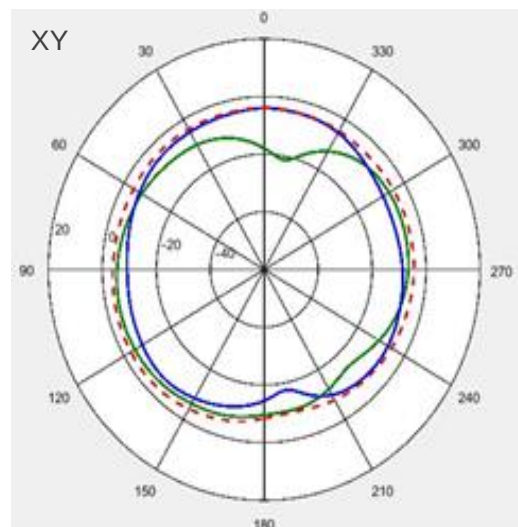
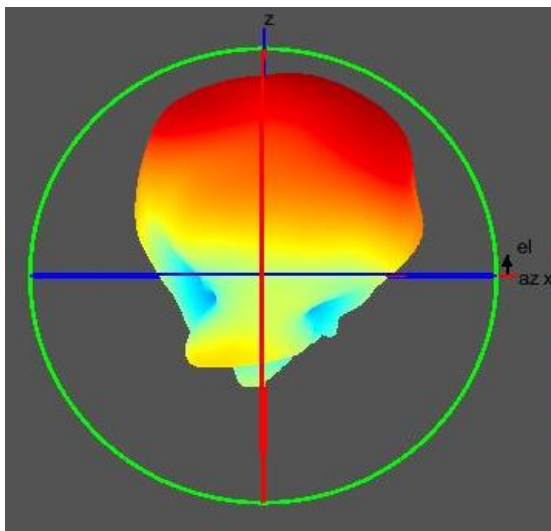
Frequency (MHz)	1575.42	1602
Gain (dBi)	2.83	1.45

4.5. Radiation Pattern

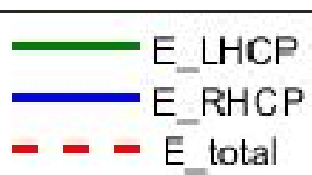
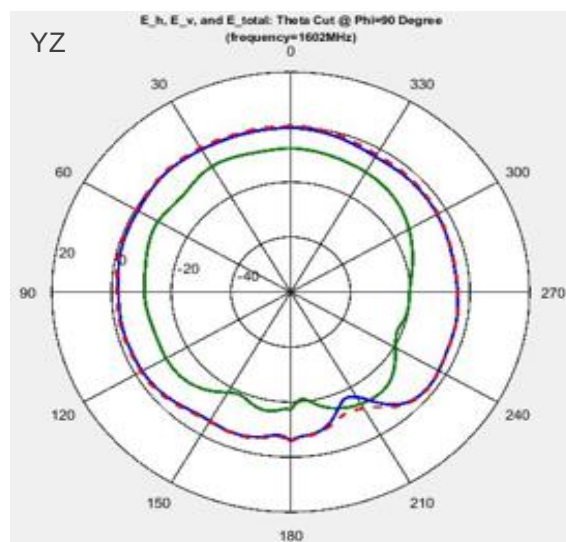
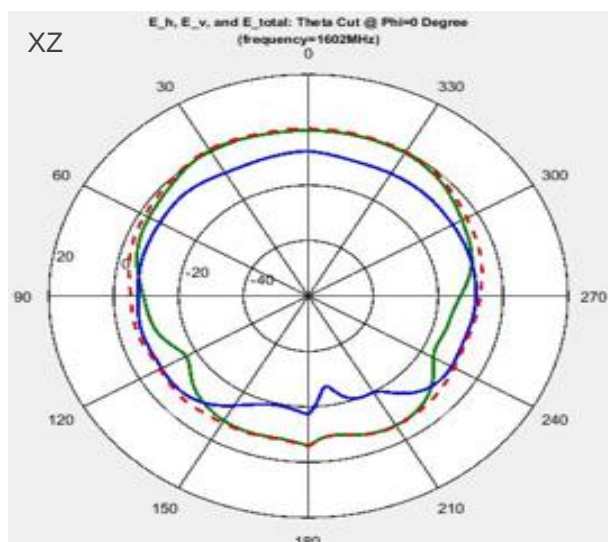
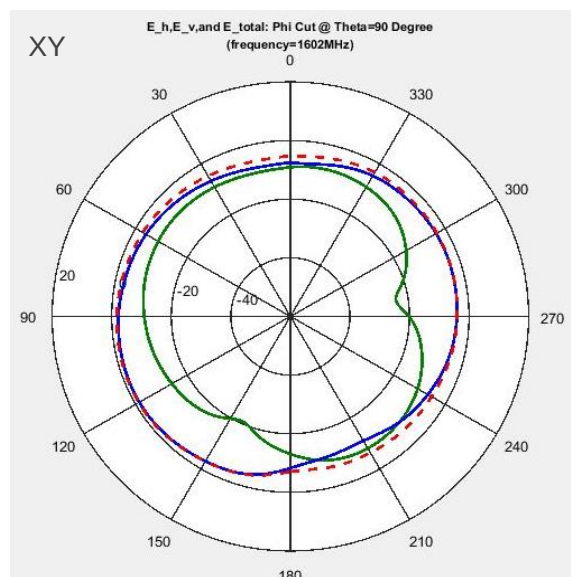
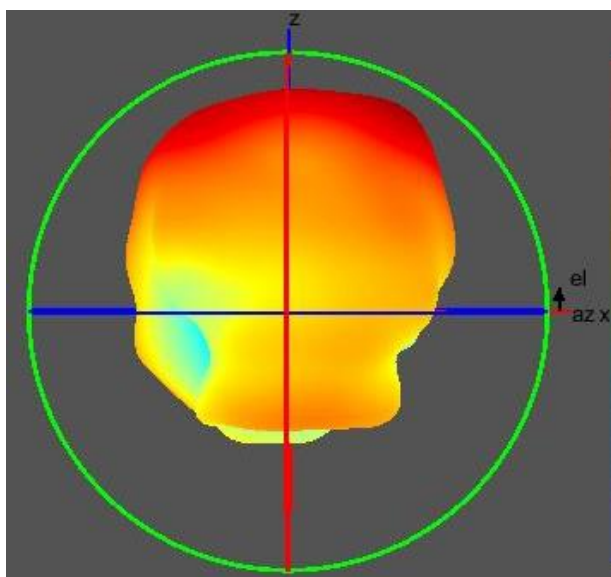


H plane: the tangent of XY
E1 plane: the tangent of XZ
E2 plane: the tangent of YZ

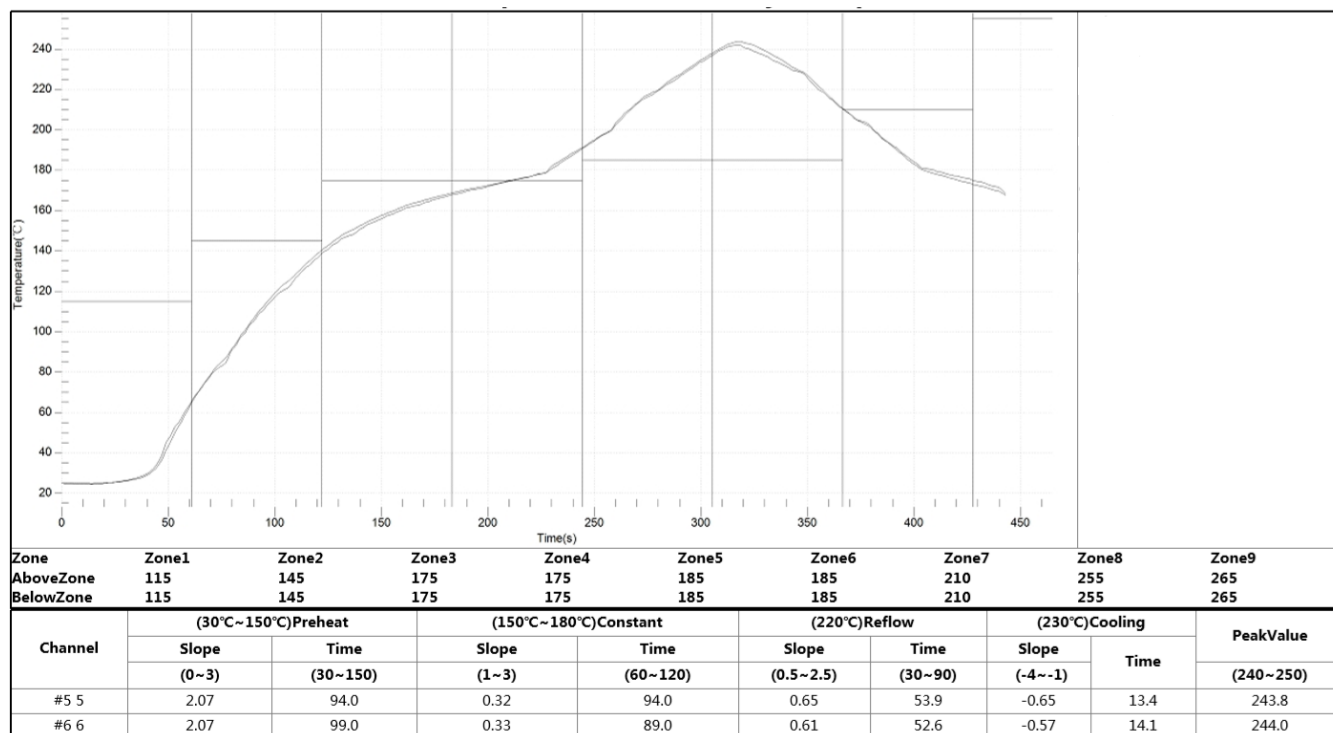
4.5.1. 1575 MHz



4.5.2. 1602 MHz

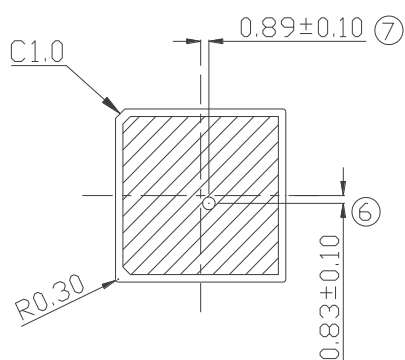


4.6. Reference Reflow Temperature

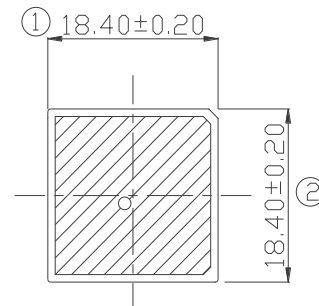
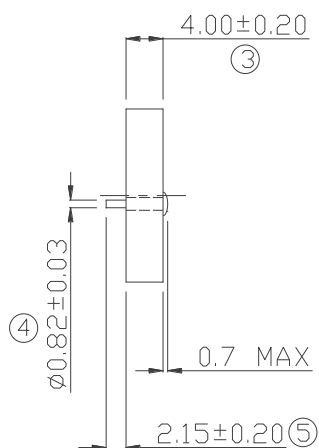


5 Product Size

ROHS



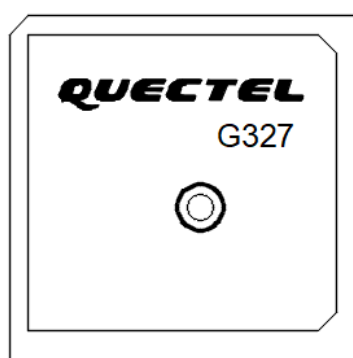
BOTTOM



TOP

- Note: No. ①—⑦ are key dimensions.

5.1. Silk Screen: Top View



6 Package

