

# PA1590MI4D-499-1ZM-A

## ENGINEERING SPECIFICATION

### 1. Typical Electrical Properties

Characteristics	Specification	Unit	Conditions
GPS Band	1575.42	MHz	Note : (1)
Polarization	RHCP		
Frequency Temperature Coefficient	0±20	ppm/°C	-40°C to +85°C

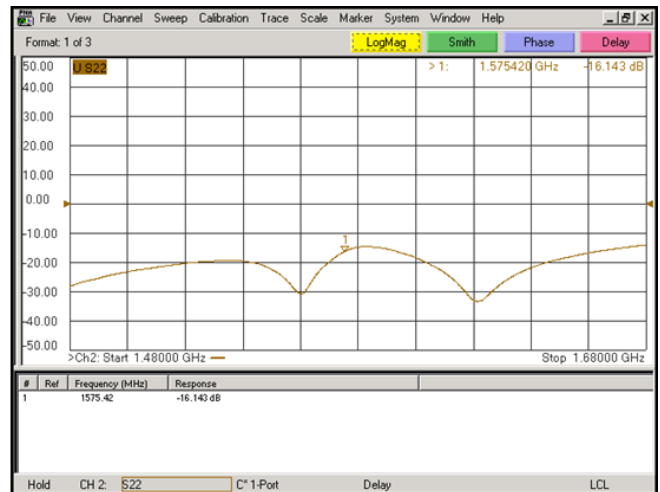
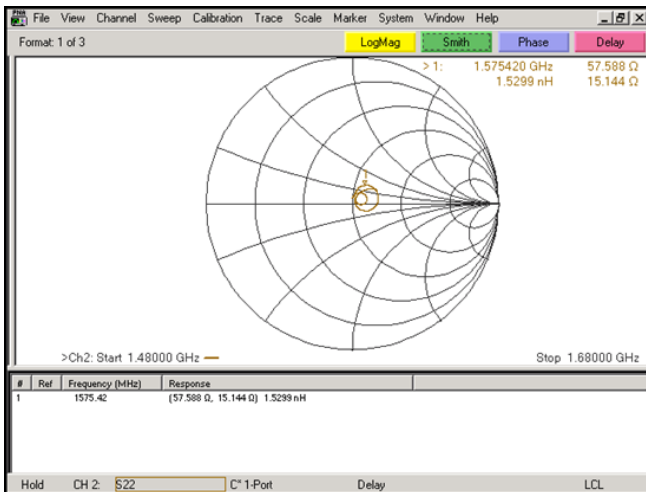
Note : (1) Patch antenna is located in project device

PA1590MI4D-499-1ZM-A, G : Green parts (RoHS compliance)

-499 are the code of project number, -1ZM show of appendix

### 2. Patch-V1 Antenna Performance and Characteristic Data in Project Device.

#### 2-1 Smith Chart/Return Loss



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±0.2      X.X=±0.2      X.XX=±0.2

ANGLES=±1      HOLEDIA=±0.2

SCALE :      UNIT : mm

DRAWN BY: 王瑞娟      CHECKED BY: 李守仁

DESIGNED BY: 許瑞麟      APPROVED BY: 黃月碧

TITLE : PA1590MI4D-499-1ZM-A  
ENGINEERING SPECIFICATION



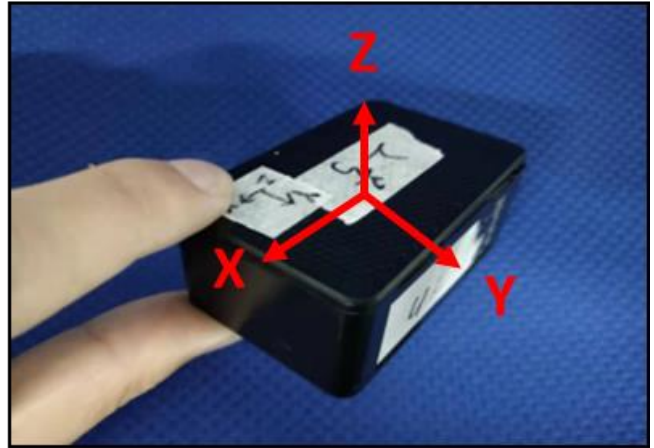
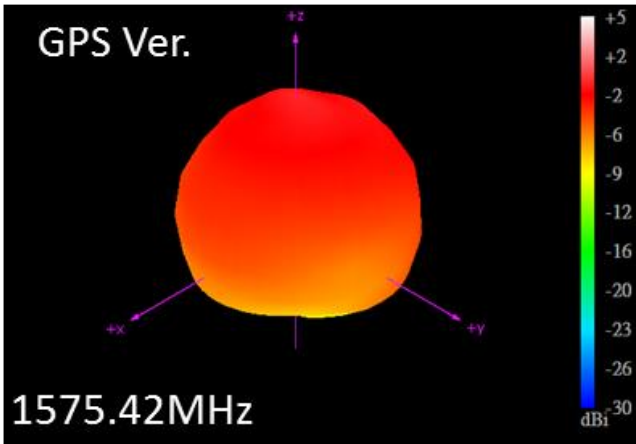
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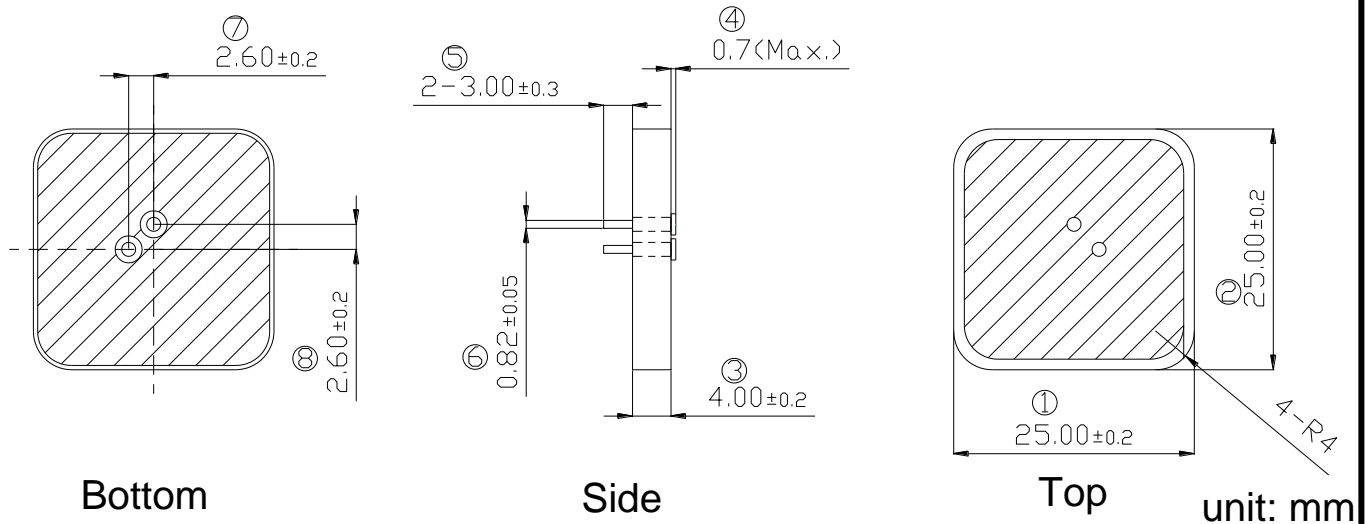
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2-2 3D Gain Pattern



3. Dimension



Note: These balloons are important dimension, the others are reference dimension.  
 For the electrical characteristics adjustment, silver electrode might be trimmed.  
 This will not affect antenna performance.

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		SPEC REV. <b>P0</b>

### 4. Explanation of Appendix

## PA1590MI4D-499-1ZM-A

(1)(2)(3)

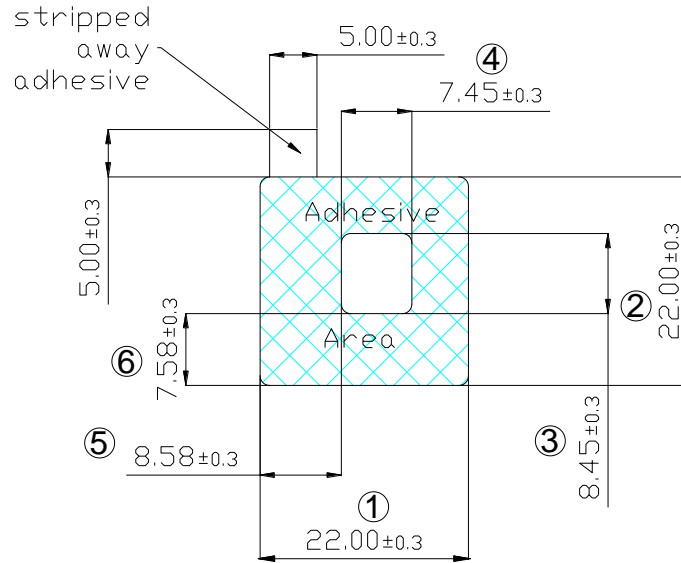
(1) "1" denotes 3.0 mm pin length

(2) Adhesive Tape "Z" denotes 22x22mm 3M 468MP

Adhesive Transfer tape specification


2.1 Thickness: 0.13mm

2.2 Dimension: mm




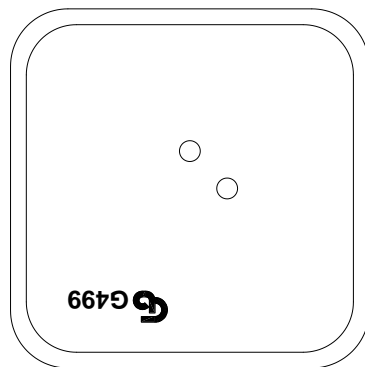
(3) Option appendix "M" denotes marking needed

Marking configuration

3.1 Logo  for INPAQ logo

3.2 Type  for green product antenna

3.3 Three digits  499 are the code of our project number



Patch top electrode

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ENGINEERING SPECIFICATION		
		SPEC REV. <b>P0</b>

**5. Caution and Warranty**

- (1) In order to slow down the oxidation and sulfurization from air onto silver, the products are sealed by vacuum packaging. It is ok to use them within 12 months of delivery.
- (2) Once the package is open, please assemble them as soon as possible. If there are products left for future assembly, please repack and reseal them within 48 hours after opening.
- (3) Please recheck the solderability before using if the products are over 12 months of delivery, no matter they are originally sealed or resealed.
- (4) The silver may eventually become tarnish because of oxidation and sulfurization, however, it won't affect the electrical performance, but only solderability. Thus, please assemble them as early as possible.

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