

PA1590MI4G-536-18M-A

ENGINEERING SPECIFICATION

1. Typical Electrical Properties

Characteristics	Specification	Unit	Conditions
GPS	1575.42 ± 3	MHz	Note : (1)
Glonass	1602 ± 3		
Polarization	RHCP		
S11	< -10	dB	
Frequency Temperature Coefficient	0±20	ppm/°C	-40°C ~ +85°C

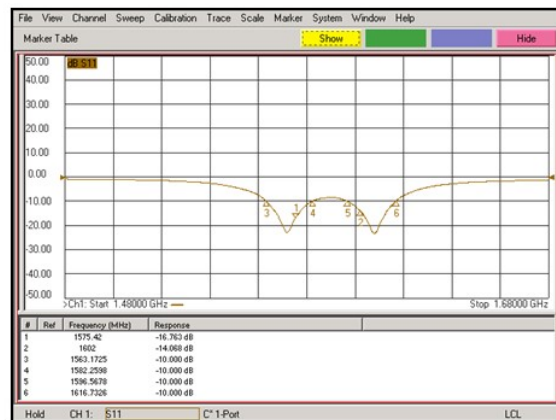
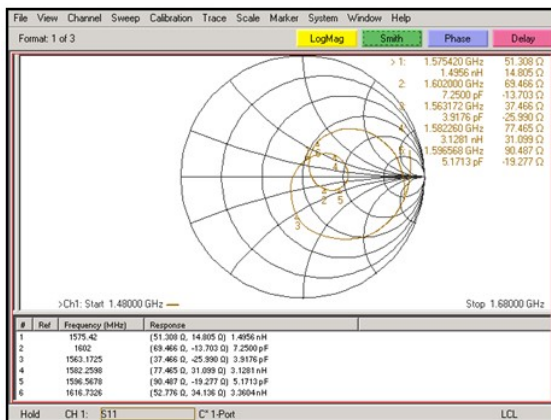
Note: (1) Patch antenna is tested on project mockup.

PA1590MI4G-536-18M-A, G: Green parts (RoHS compliance)

-536 are the code of project number, -18M show of appendix

2. Patch-V1 Antenna Performance and Characteristic Data

2.1 Smith Chart/Return Loss



Galileo Patch antenna size 25x25x4mm

Frequency (MHz)	S ₁₁ (dB)	Bandwidth(MHz):S ₁₁ < -10dB
1575.42	-16.76	19.08 (1563.17 ~ 1582.25)
1602	-14.07	20.17 (1596.56 ~ 1616.73)

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±0.2 X.X=±0.2 X.XX=±0.2

ANGLES=±1

HOLEDIA=±0.2



INPAQ TECHNOLOGY CO., LTD.

SCALE :

UNIT : mm

DRAWN BY:王瑞娟

CHECKED BY: 許瑞麟

DESIGNED BY:洪嘉晟

APPROVED BY: 李守仁

TITLE : PA1590MI4G-536-18M-A

ENGINEERING SPECIFICATION

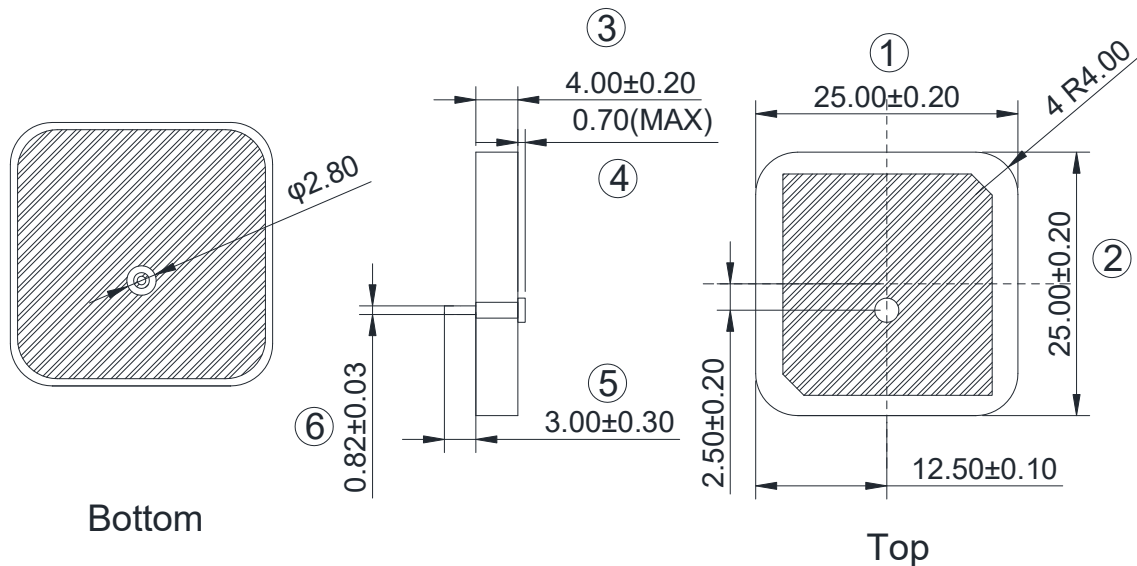
DOCUMENT
NO.

ENS000150850

SPEC REV.

A0

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.

UNLESS OTHER SPECIFIED TOLERANCES ON :
 $X = \pm 0.2$ $X.X = \pm 0.2$ $X.XX = \pm 0.2$
 ANGLES = ± 1 HOLEDIA = ± 0.2



INPAQ TECHNOLOGY CO., LTD.

SCALE : UNIT : mm
 DRAWN BY: 王瑞娟 CHECKED BY: 許瑞麟
 DESIGNED BY: 洪嘉晟 APPROVED BY: 李守仁

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO., LTD. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : PA1590MI4G-536-18M-A
 ENGINEERING SPECIFICATION

DOCUMENT
 NO.

ENS000150850

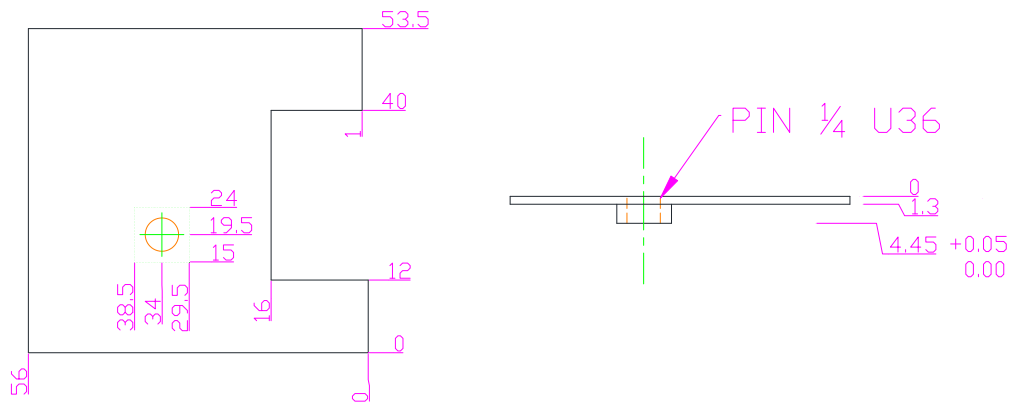
SPEC REV.
 A0

4. Typical Electrical Properties on INPAQ Test Ground :

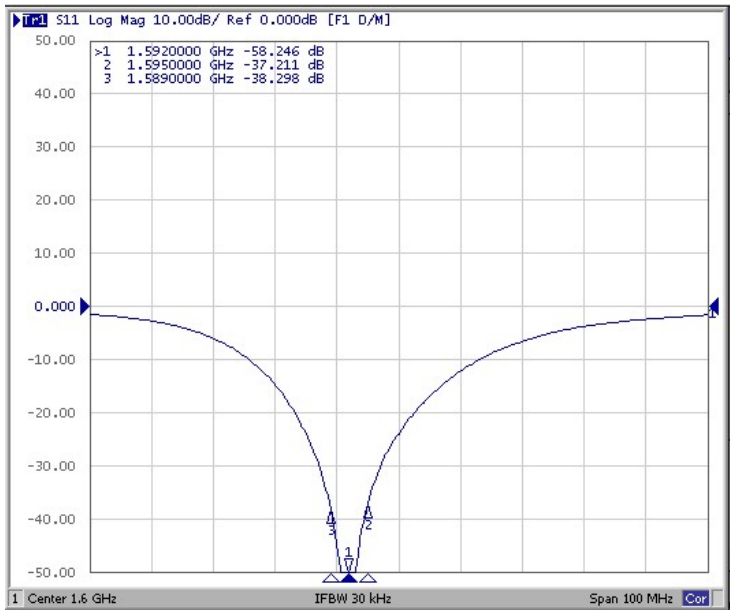
Characteristics	Specification	Unit	Conditions
Patch Center Frequency	1592± 3	MHz	on INPAQ Test Ground
S ₁₁	< -20	dB	

5. Test Condition Ground Plane :

G-PA1590MI4G-536-18M-A-V1



6. Return Loss Characteristics :



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±0.2 X.X=±0.2 X.XX=±0.2

ANGLES=±1 HOLEDIA=±0.2



INPAQ TECHNOLOGY CO., LTD.

SCALE :

UNIT : mm

DRAWN BY:王瑞娟

CHECKED BY: 許瑞麟

DESIGNED BY:洪嘉晟

APPROVED BY: 李守仁

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

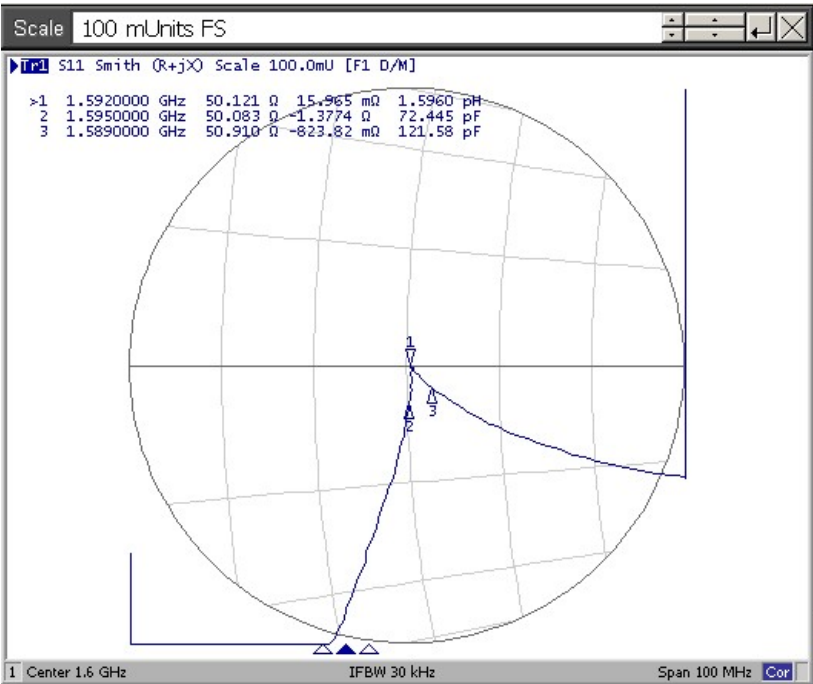
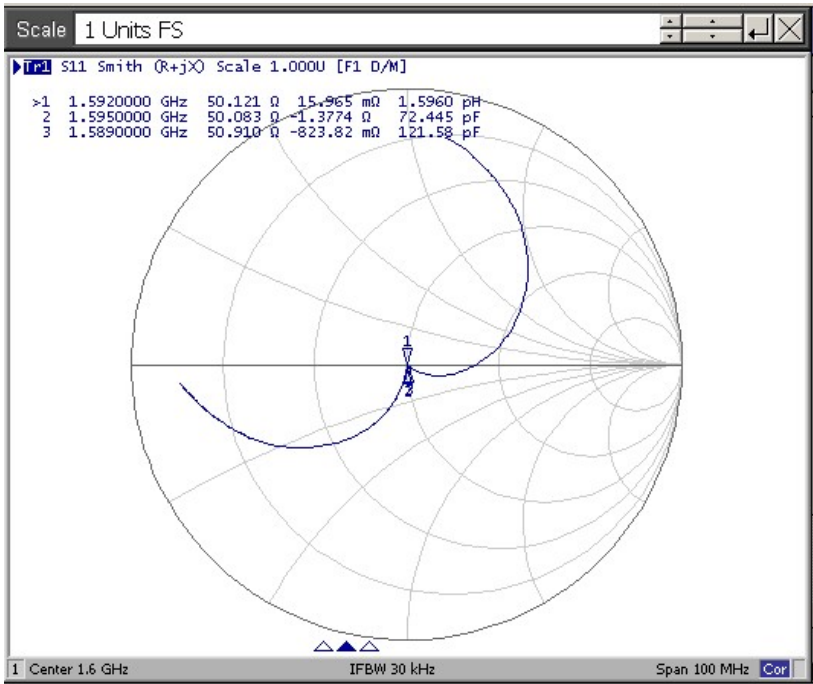
TITLE : PA1590MI4G-536-18M-A
ENGINEERING SPECIFICATION

DOCUMENT
NO.

ENS000150850

SPEC REV.
A0

7. Measured Input Impedance on a Smith Chart :



8. Explanation of Appendix

PA1590MI4G-536-18M-A

(1)(2)(3)

(1) “1” denotes 3.0 mm pin length

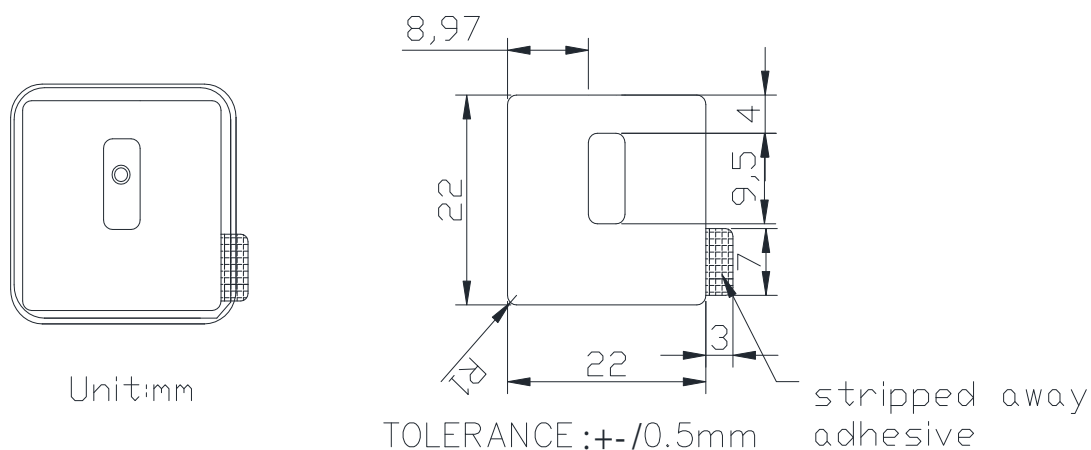
(2) Adhesive tape “8” specification

2.1 Tape: Nitto 5000NS 22x22x0.16mm

2.2 Thickness: 0.16mm

2.3 Release liner: 0.1mm

2.4 Dimension unit: mm



(3) Option appendix **M** Marking

Marking configuration

3.1 Logo  for INPAQ logo

3.2 Type  for green product antenna

3.3 Three digits  are the code of our project number



UNLESS OTHER SPECIFIED TOLERANCES ON :
X=±0.2 X.X=±0.2 X.XX=±0.2
ANGLES=±1 HOLEDIA=±0.2



INPAQ TECHNOLOGY CO., LTD.

SCALE :

UNIT : mm

DRAWN BY:王瑞娟

CHECKED BY: 許瑞麟

DESIGNED BY:洪嘉晟

APPROVED BY: 李守仁

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

TITLE : PA1590MI4G-536-18M-A
ENGINEERING SPECIFICATION

DOCUMENT
NO.

ENS000150850

SPEC REV.
A0