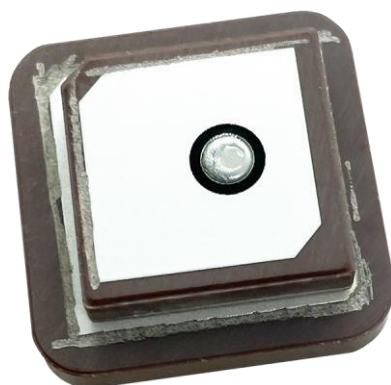


YIC



GNSS L1+L2 Ceramic Patch Antenna ATPGGBL2R2580A

Datasheet

1. Product Information

1.1 Product Description

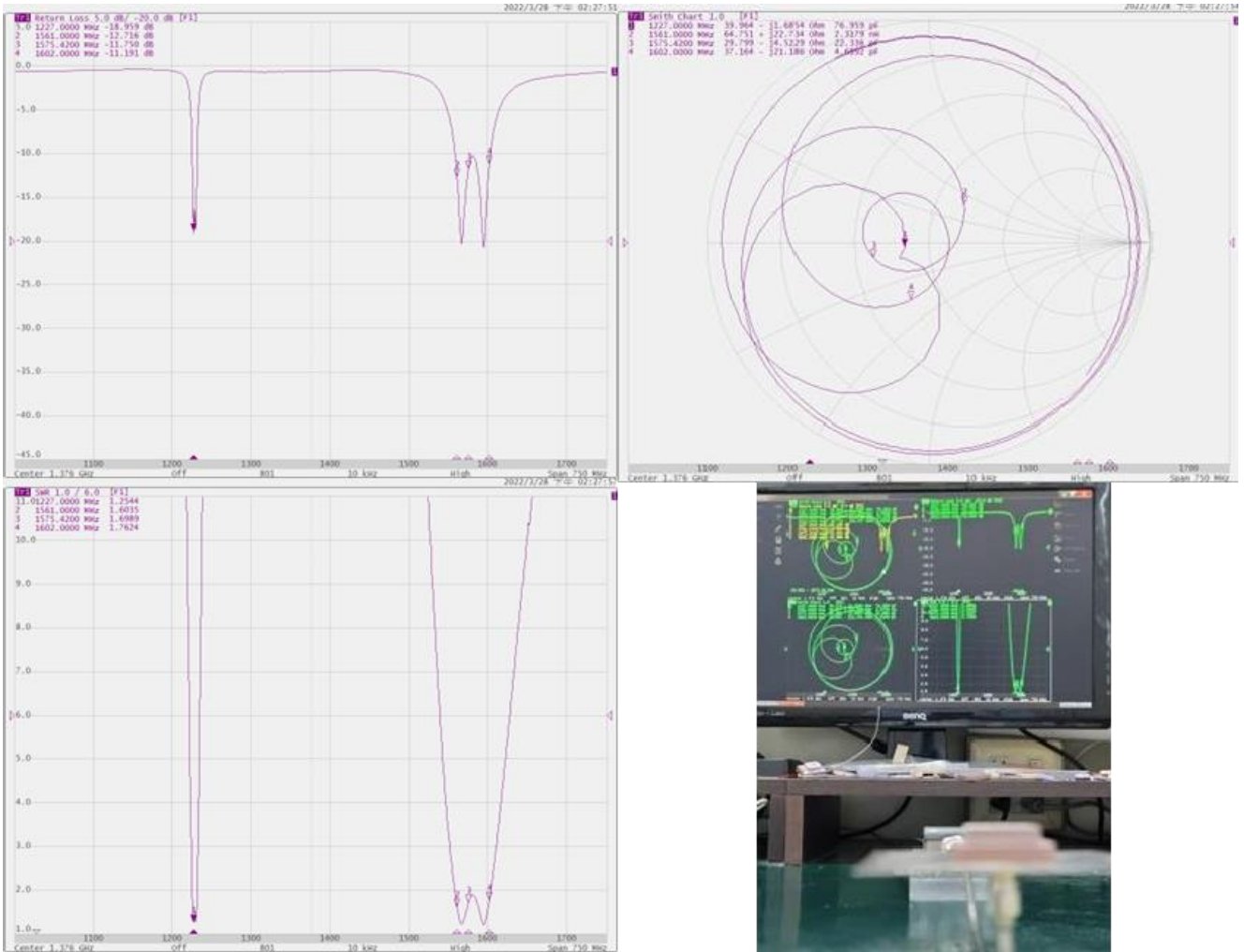
This product can be used as various L1+L2 GPS/Beidou/Galileo/GLONASS navigation, clock, positioning.

2. Part No. : ATPGGBL2R2580A

3. Electrical Characteristics

Characteristics	SPEC
Range Of Receiving Frequency	L1: 1575.42 ± 1.023 MHz L2: 1227.6 ± 10 MHz GLONASS: 1602 ± 5 MHz Beidou: 1561.098 ± 2.046
Center Frequency	L1: 1575 ± 3 MHz L2: 1227.6 ± 10 MHz
Bandwidth	L1: 22MHz min L2: 10MHz min
VSWR	1.8 max
Gain at Zenith	L1: 4 dBic typ. L2: 2.8 dBic typ. GLONASS: 3.2 dBic typ. Beidou: 2.8 dBic typ.
Polarization	Right Hand Circular Polarization
Impedance	50 Ohm
GND Plane	With 70×70 mm GND Plane
Return Loss	@-10dB

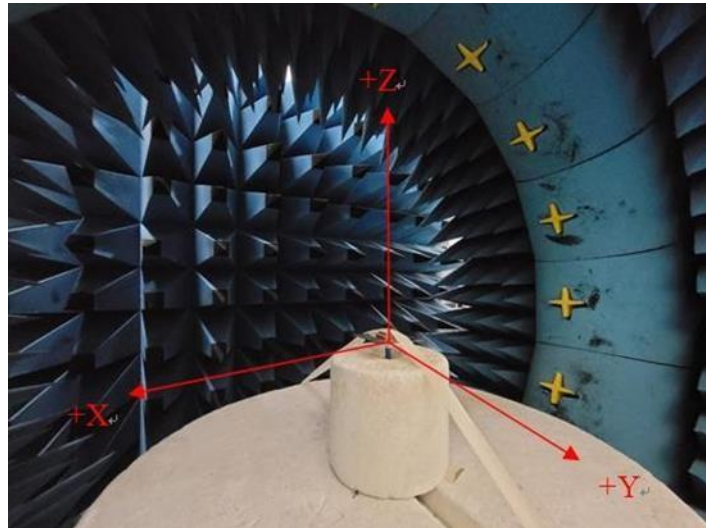
4. Patch 25x25 ,18x18 on L1+L2 S11 Return Loss & Smith Chart Measure



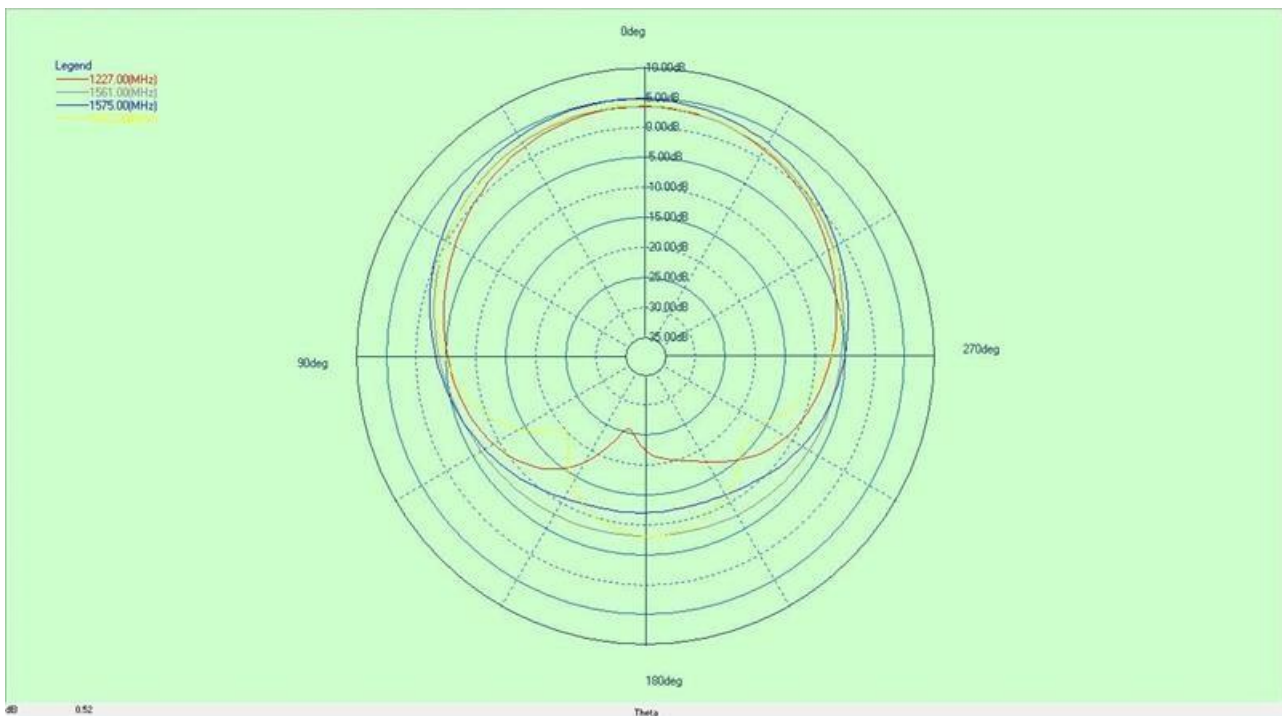
25x25+18x18	Return Loss(dB)	Impedance(Ohm)	VSWR(MHz)
1227MHz	-18.95	39.96-j1.68	1.25
1561MHz	-12.71	64.75+j22.73	1.6
1575MHz	-11.75	29.79+j4.52	1.69
1602MHz	-11.19	37.16-j21.18	1.76

5. Radiation Pattern

2D Pattern

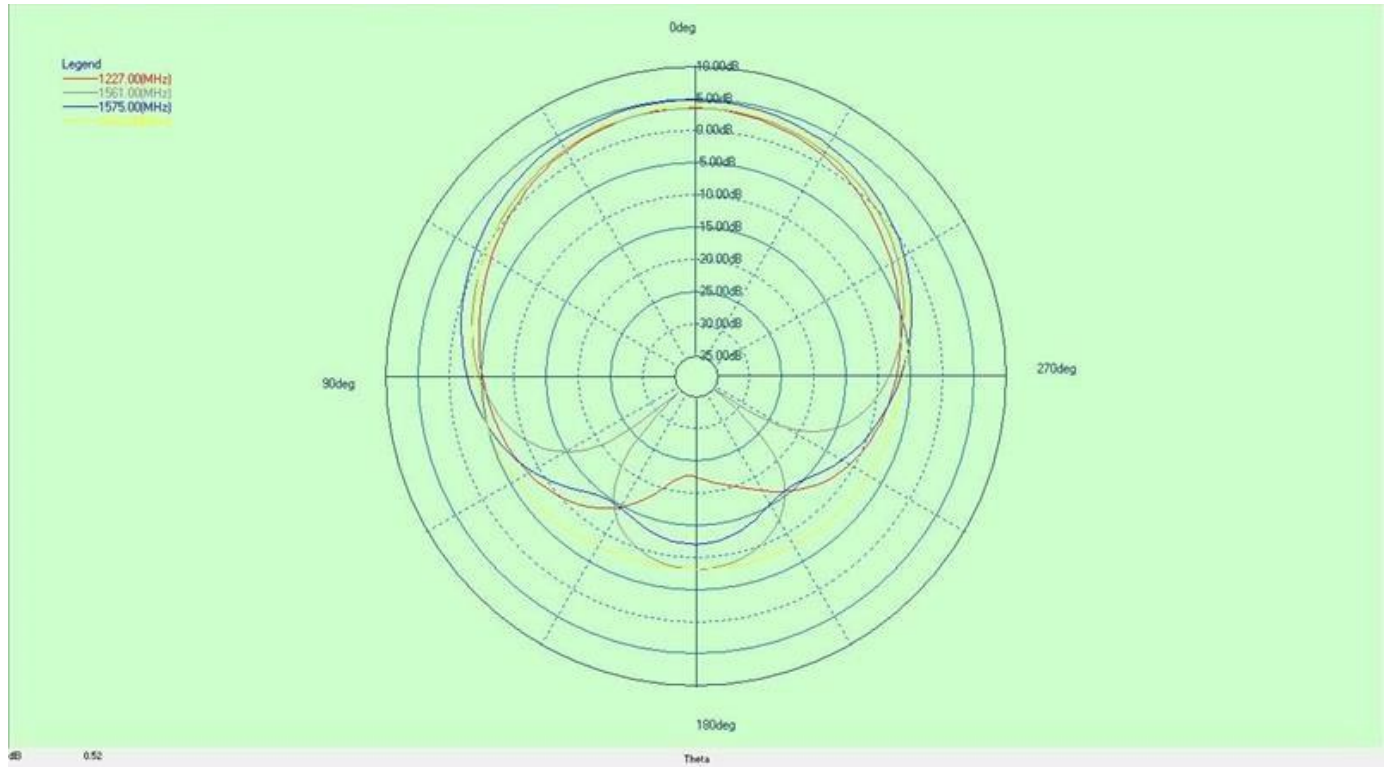


5.1 XZ -Plane



Frequency	Peak Gain	Zenith Gain
1227MHz	3.36	3.34
1561MHz	3.4	3.31
1575 MHz	4.66	4.57
1602 MHz	3.83	3.77

5.2 YZ -Plane



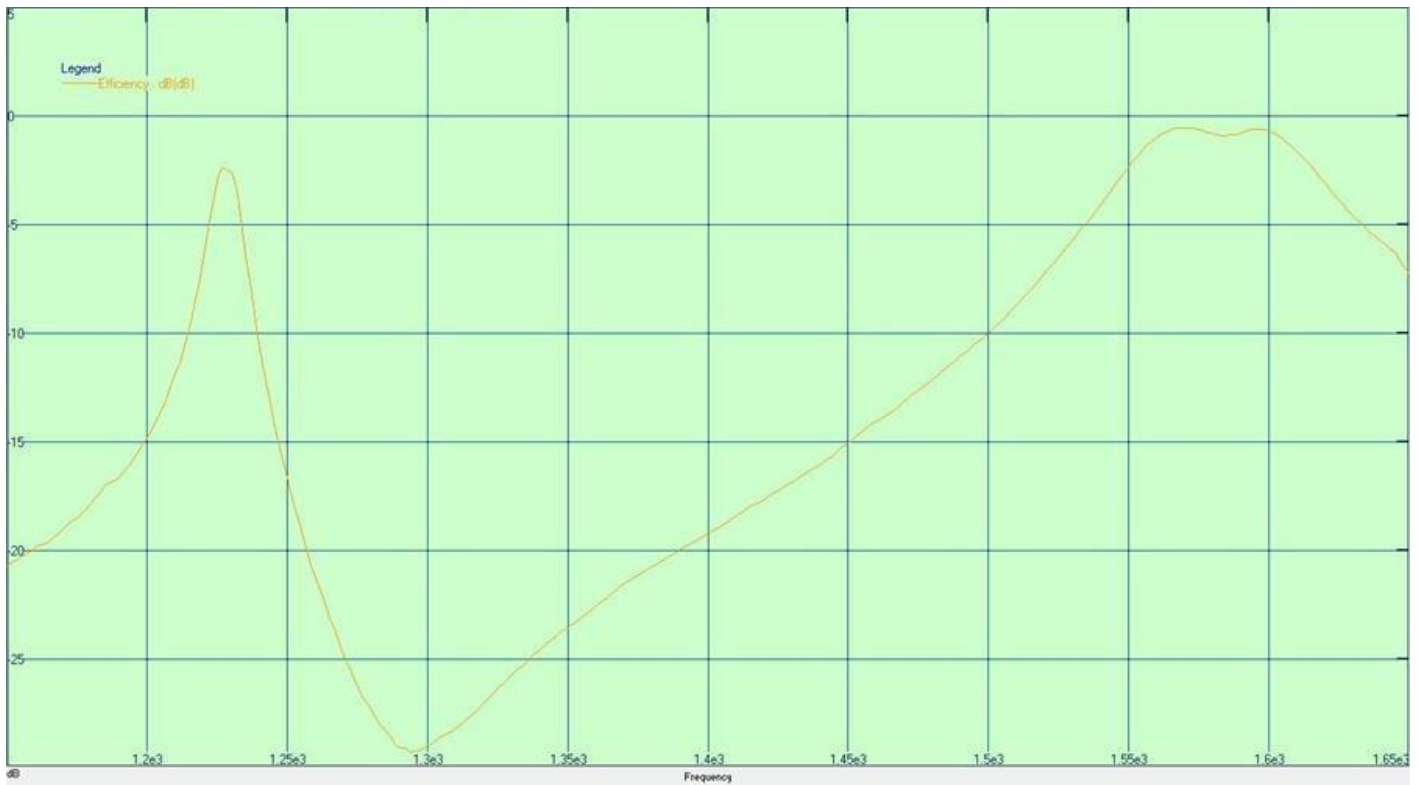
Frequency	Peak Gain	Zenith Gain
1227MHz	3.36	3.34
1561MHz	3.32	3.31
1575 MHz	4.59	4.57
1602 MHz	3.77	3.77

5.3 Efficiency



Frequency	1227MHz	1561MHz	1575MHz	1602MHz
(Unit: %)	57	81	87	83

5.4 Average Gain



Frequency	1227MHz	1561MHz	1575MHz	1602MHz
(Unit: dBi)	-2.38	-0.86	-0.59	-0.78

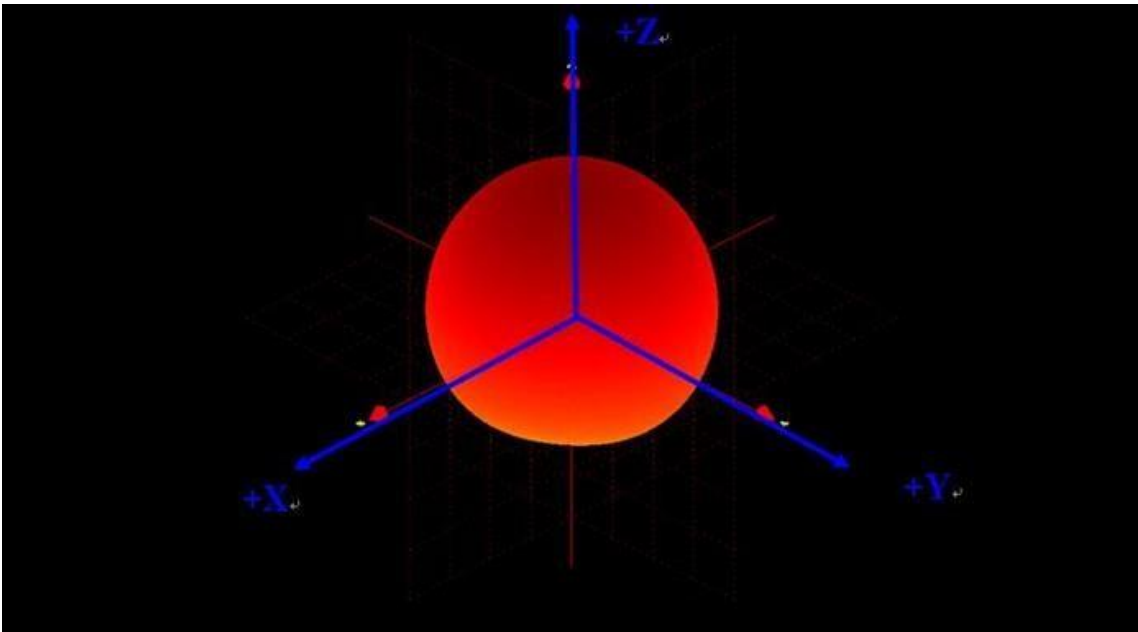
5.5 Peak Gain



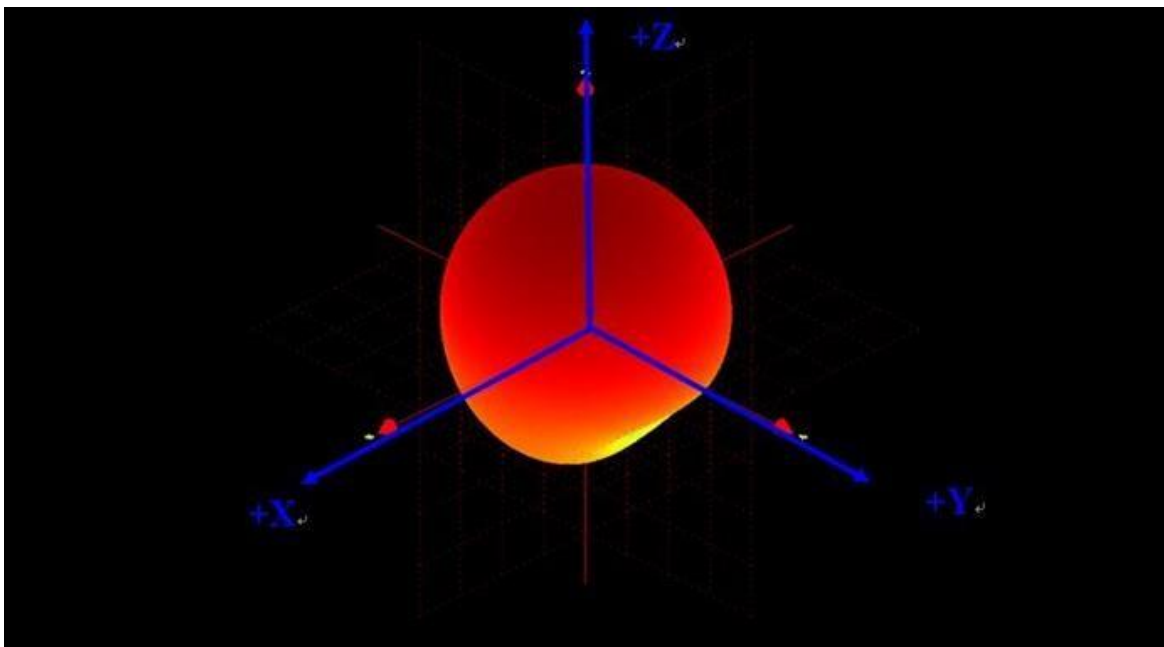
Frequency	1227MHz	1561MHz	1575MHz	1602MHz
(Unit: dBic)	3.28	3.41	4.68	3.82

6. 3D Radiation Pattern

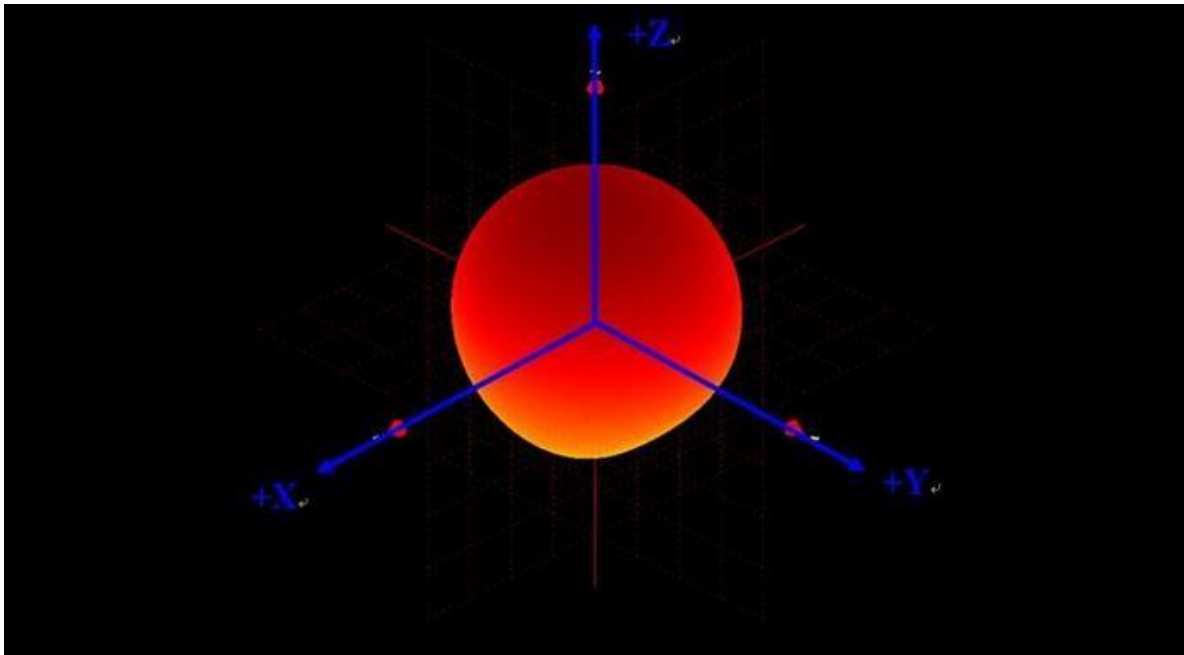
6.1 1227MHz



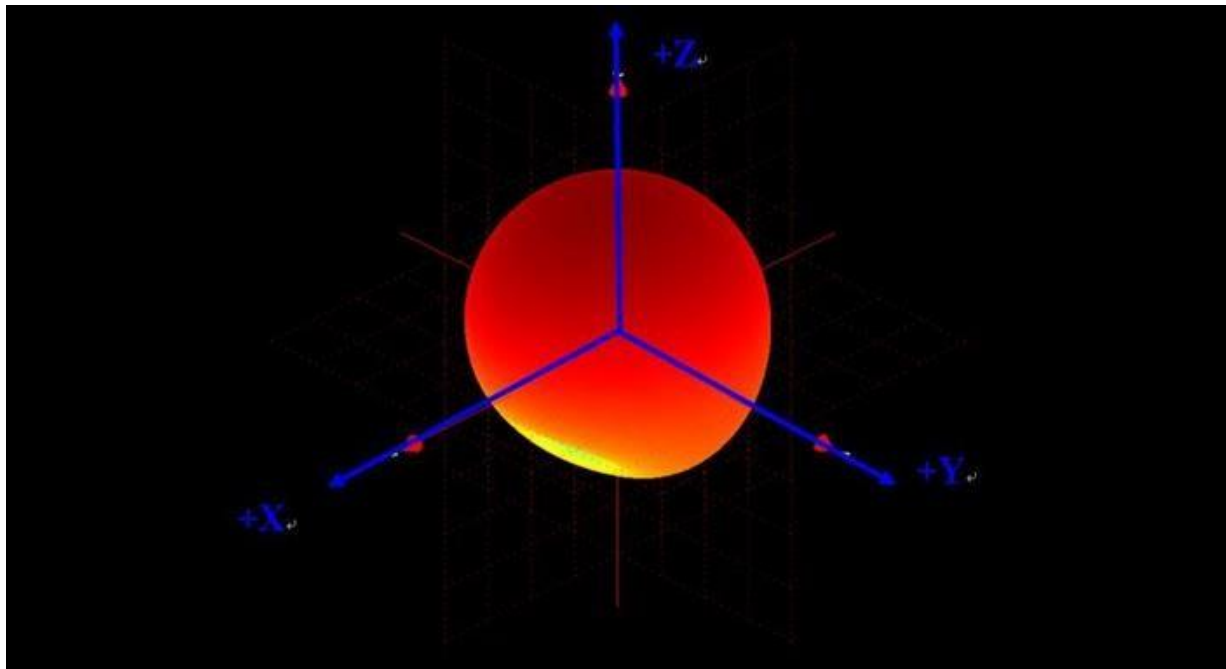
6.2 1561MHz



6.3 1575MHz



6.4 1602MHz



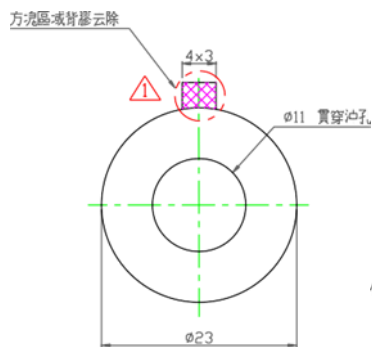
7. Operating Condition

Temperature	-40°C to +85°C
Humidity	10% to 95% RH

8. Storage Condition

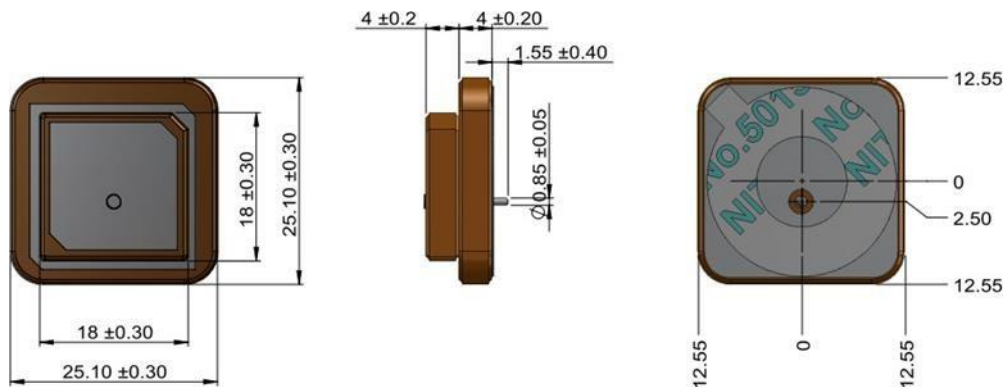
Temperature	-40°C to +85°C
Humidity	10% to 95% RH

9. Tape Dimension



備註: 1. NITTO : NO.5015
 2. Double-coated adhesive tape for industrial use
 3. Thickness : 0.12mm

10. Outline



11. Note

- 1、 This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.
- 2、 We cannot warrant against failure caused by any use of our product that deviates from the intended use as described in this product specification.
- 3、 The product will get free warranty for three months since the date of purchase users operate in the correct way; users will have to pay cost of the materials and maintaining fee out of the condition.
- 4、 Electrostatic sensitive device Observe precautions for handling.