

Datasheet

GNSS Patch antenna

Embedded

Features:

The patch antenna supports GPS+Glonass, has much higher efficiency and small form factor, pin-connector and easy mounting, suitable for mounting inside device.

Applications:

- Navigation device
- Telematics box
- Fleet management
- Portable Handsets
- Tracking and Positioning



15 X 15 X 4 mm

GNSS Antenna



Electrical Specifications

Antenna Characteristics By Range Of Receiving Frequency

Frequency (MHz)	1575.42 ± 1	1602 ± 5
Return Loss (dB)	< -10	< -10
Gain (dBi) @Zenith at 20mm × 20mm ground	-5.5 typ.	-2.0 typ.
Bandwidth (MHz)	10	9
Efficiency (%) @Center Frequency	40	47
Impedance (Ω)	50	50

Mechanical Specifications

Environmental

Temperature Range (°C)

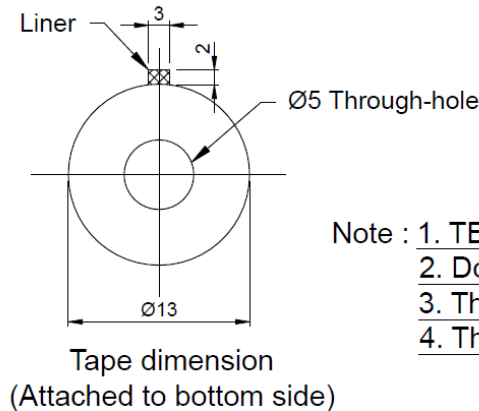
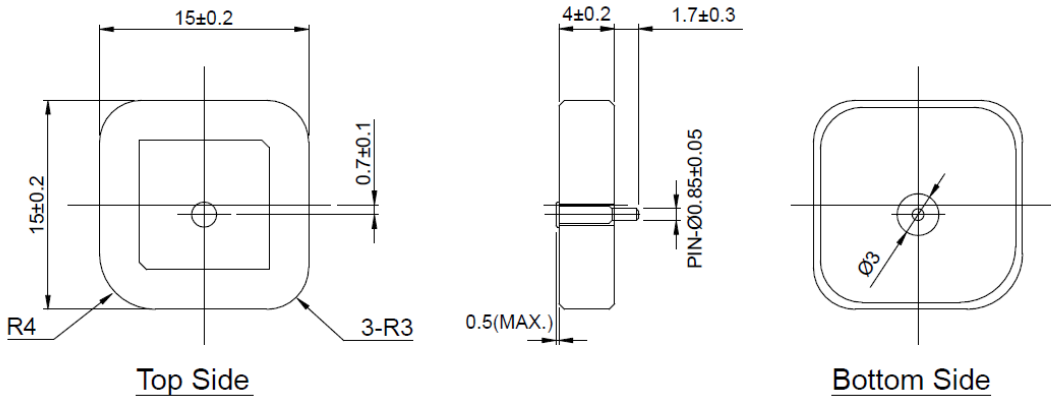
-40 to 105

RoHS Compliant

Part Number	Length (mm)	Width (mm)	Height (mm)	Weight (g)
ST0543-00-N02-U	15.0	15.0	4.0	4.6

Mechanical Drawing

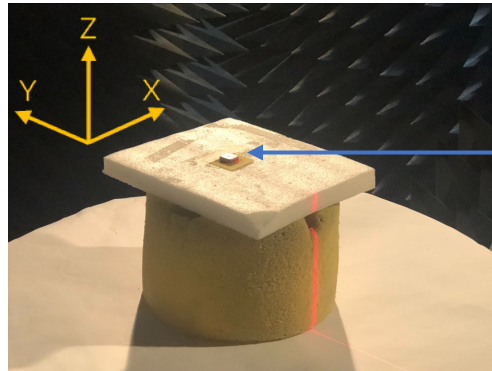
Unit : mm



- Note :
1. TESA : NO.4972
 2. Double Sided Very Thin Filmic Tape
 3. Thickness : 0.05(±0.02)mm
 4. The unmarked tolerance is ±0.2

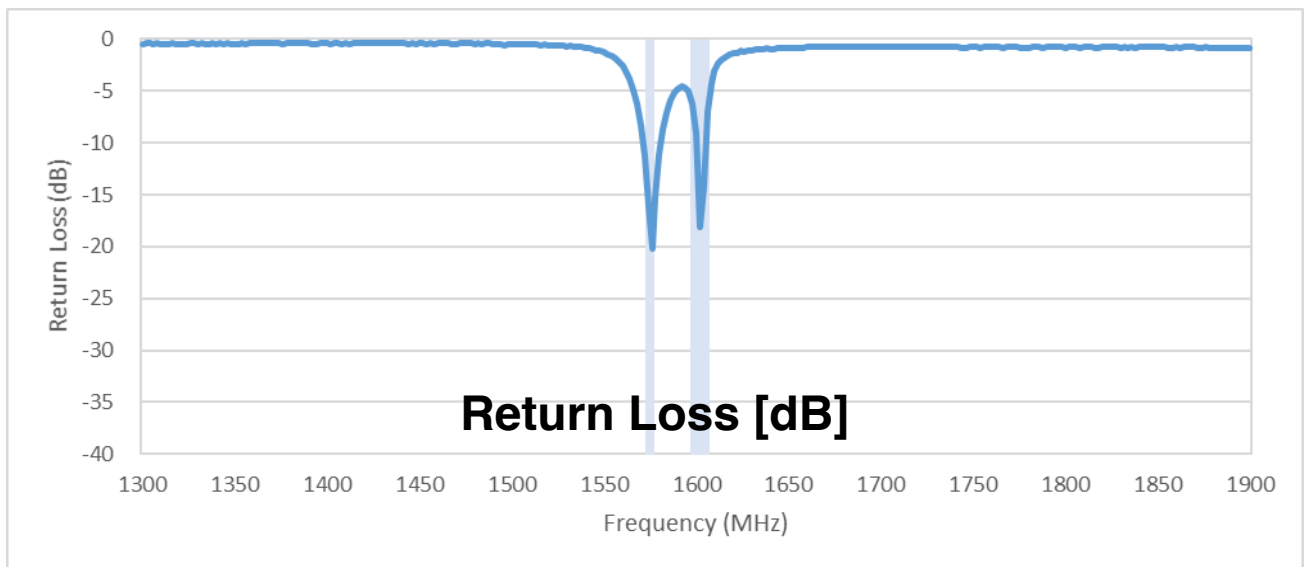
ST0543-00-N02-U

Charts In Free Space



ST0543-00-N02-U

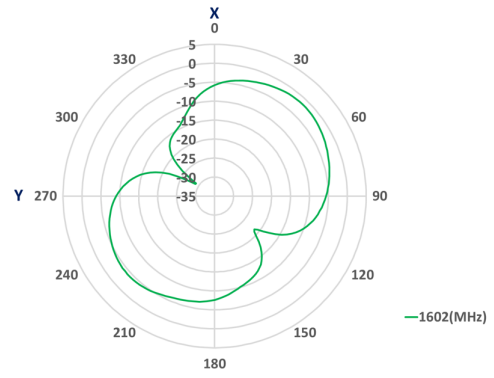
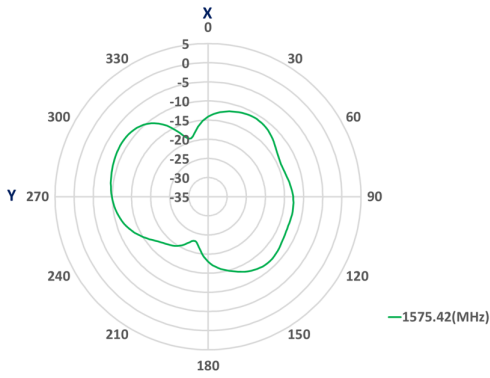
Test setup, measurement performed in 3D anechoic chamber.



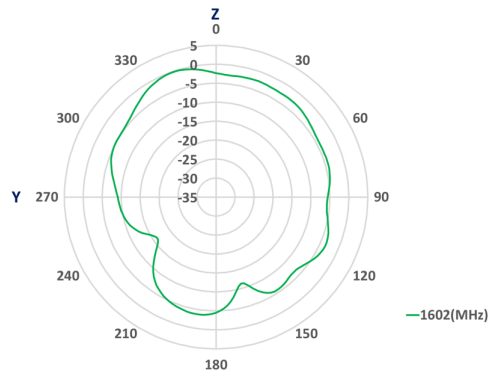
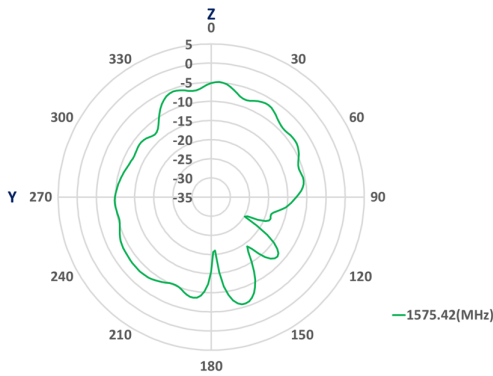
Blue background represents frequency response.

Radiation Pattern - Free Space

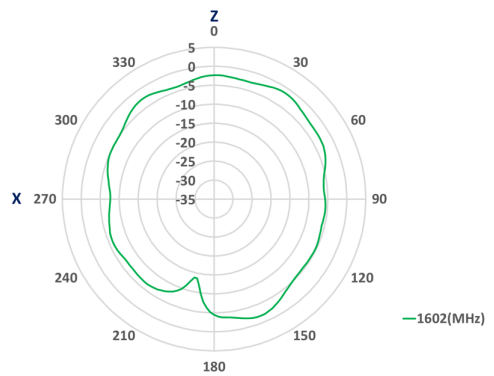
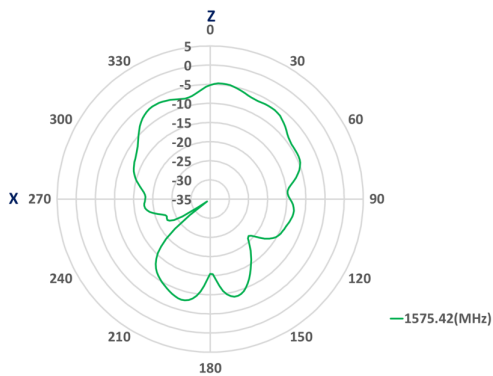
XY - Plane



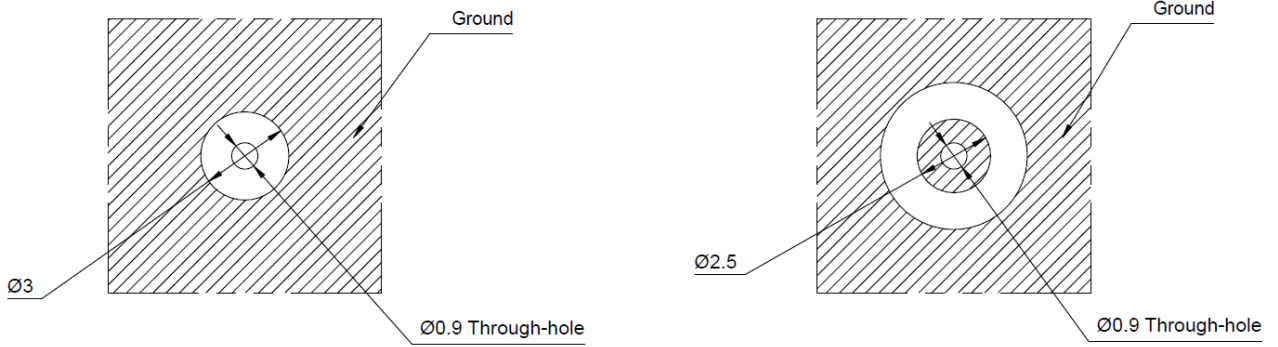
YZ - Plane



XZ - Plane



Layout Dimension



Top Side

Tolerance: +/-0.2

Bottom Side

Revisions

Rev.	Description	Date	ECN	Approval
A	Initial Release	2022-12-20	ST0543-00-N02-U-RA00	ATC

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