

## 1559-1610 MHz GNSS ACTIVE ANTENNA

**Part Number: 2108852-1**

### FEATURES & BENEFITS

- L1+G1 bands for GNSS
- Active Patch Antenna
- The following data is based on 25 x 25mm ground size
- Different cable lengths and connector options available
- No matching circuits required

### RF SPECIFICATIONS

Frequency Range (MHz)	1559 - 1610
VSWR	< 3.3:1
System gain at Zenith @ 5V	Typ. 30.2~34.0 dBic
Axial ratio at Zenith	Typ. 11.6 dB
Average Gain (Cable loss included)	25.9 dBic
Noise Figure	Typ. 1.6 dB @ 5V
Group Delay @ Zenith Variation Across Single Constellation(ns)	26.7
Phase Center Variation PCV (mm) including Active Circuitry	N/A
LNA (Voltage & Current)	DC Voltage Range 3.0~5.0 V & 9.0 mA @ 5.0V
Feed Point Impedance	50 ohms
Polarization	RHCP

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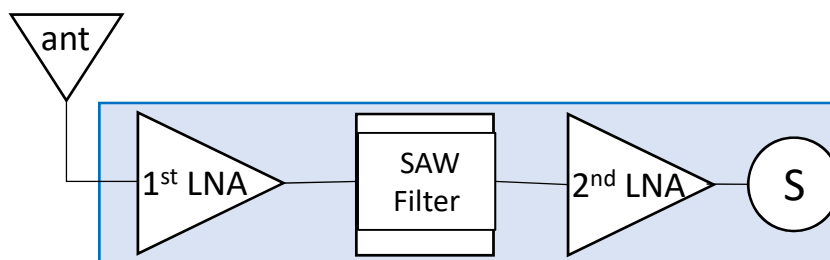
Standard Antenna Solutions

### MECHANICAL SPECIFICATIONS

Size	25.0 mm x 25.0 mm x 10.5 mm
Weight	< 17.0 g
Mounting	Adhesive Tape
Mating Connector	MHF-type receptacle (TE PN 2337019-1)
Cable	Coaxial Cable: 1.13mm Dia. (Length : 100±3 mm)
Operating Temperature	-40 to +85°C
Storage Temperature	-40 to +85°C
Hazardous Materials	A certificate of conformance is available from the product page on TE website.

### OUT OF BAND ATTENUATION

Frequency (MHz)	1459( $F_0-100$ )	1710( $F_0+100$ )
Atten. (dB)	33.64	32.82
L1 $F_0 = 1559$ MHz & 1610 MHz		



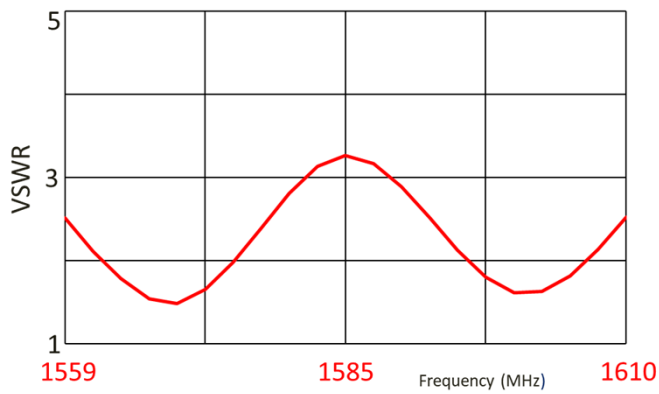
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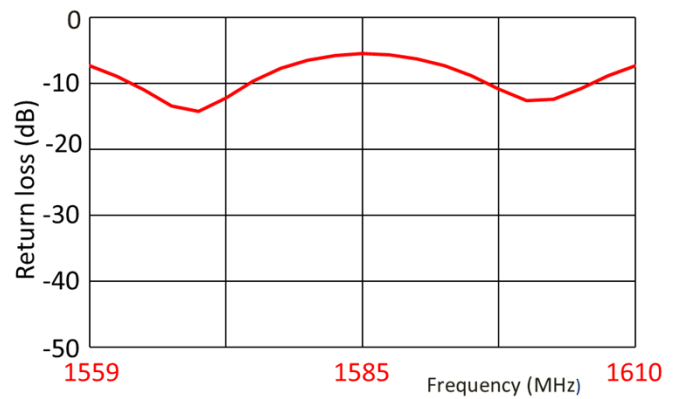
## RF DATA

(shown as 2108852-1 : Ground size : 25 x 25 mm, DC 5V & Current 9.0mA.)

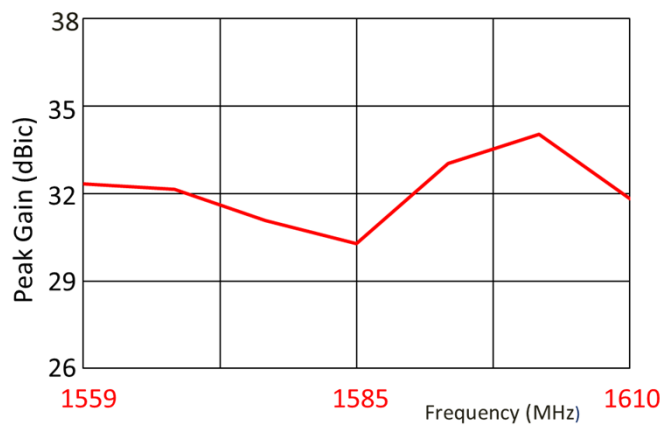
### VSWR



### Return Loss



### Peak Gain



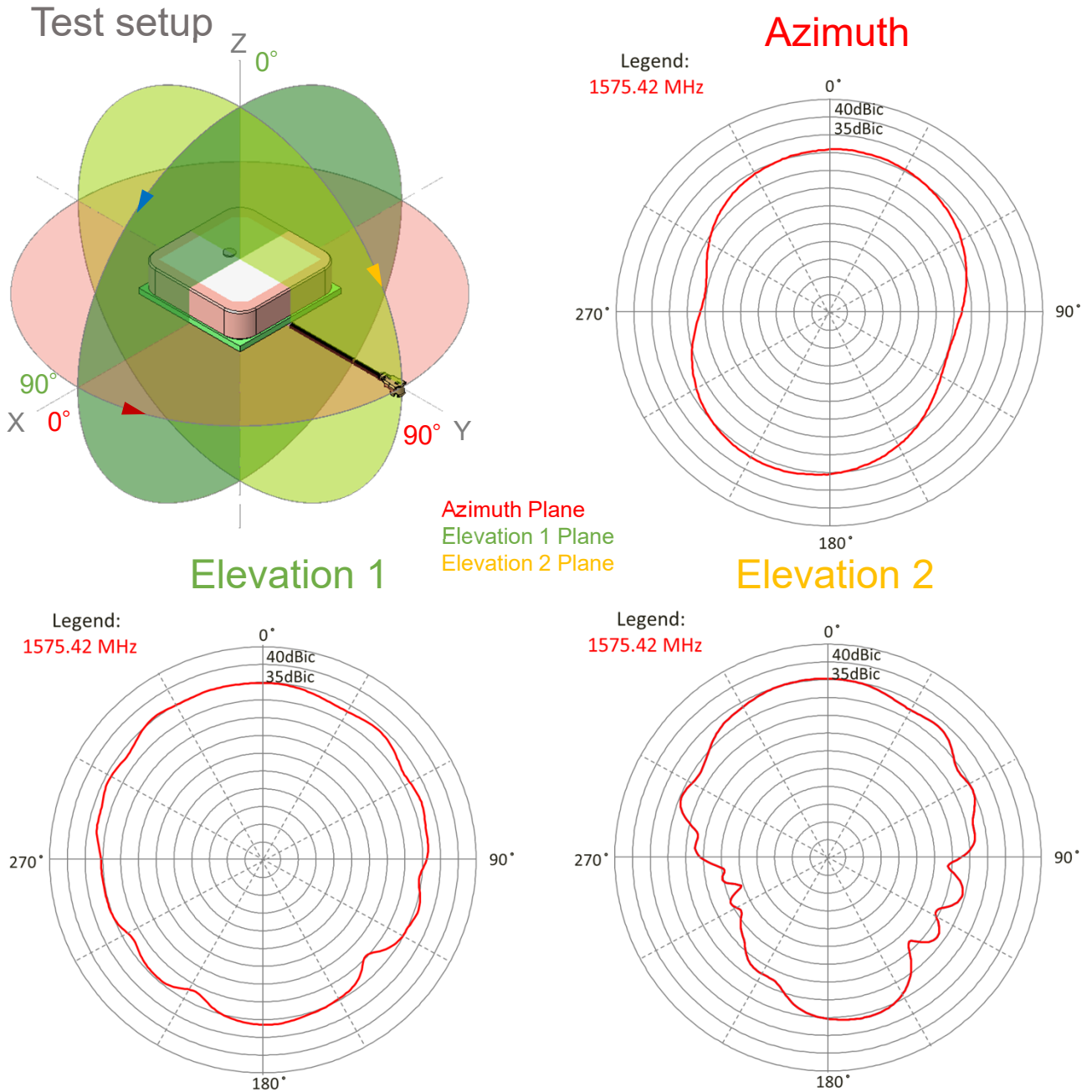
Antenna gain varies with cable length

# 1559-1610 MHz GNSS ACTIVE ANTENNA

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## RADIATION PATTERN

(shown as 2108852-1 : Ground size : 25 x 25 mm, DC 5V & Current 9.0mA.)

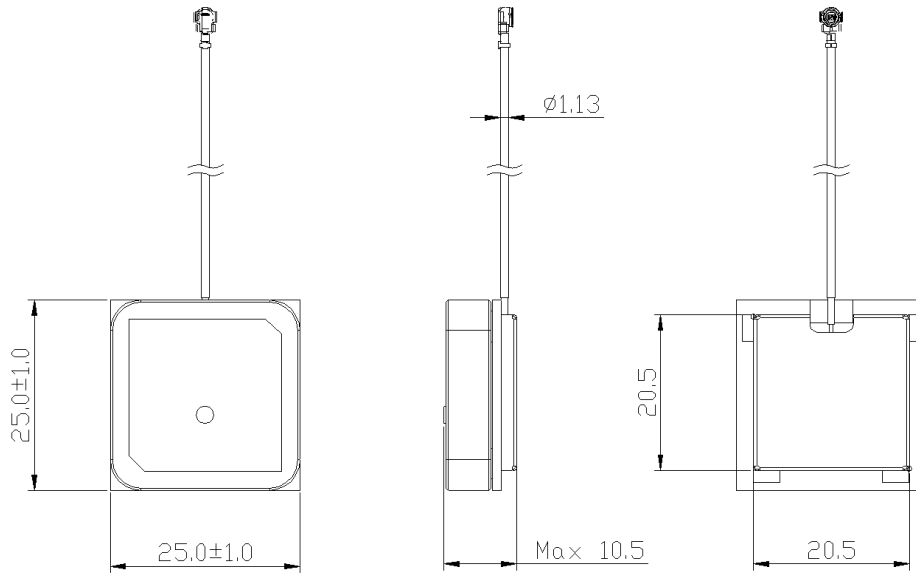


Antenna gain varies with cable length

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## DIMENSIONS



Dimension: mm  
Diagrams is not to scale

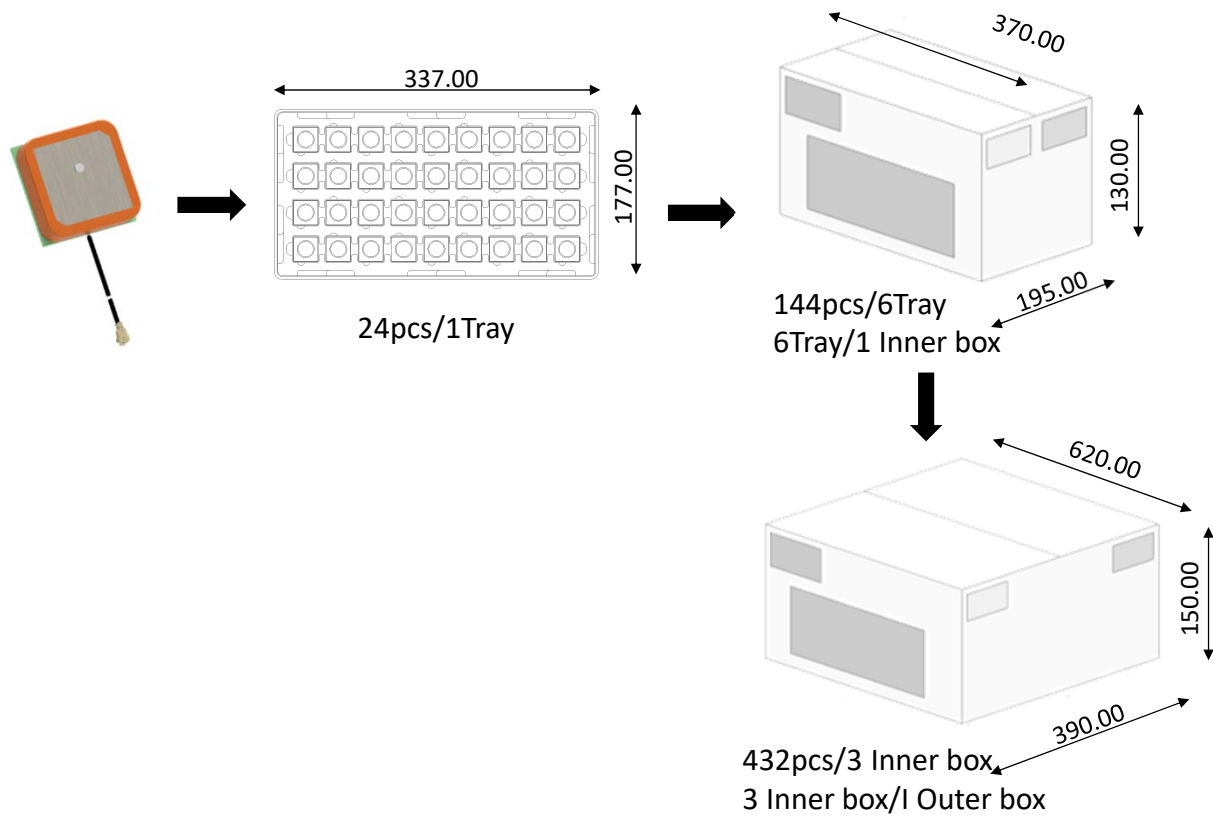
## MATING COMPONENTS

2108852-1	100.0	3.937	MHF-TYPE PLUG	RECEPTACLE (TE PN: 2337019-1)	
PART NUMBER	MM	INCH	CONNECTOR TYPE (ON CABLE)	PART NUMBER	IMAGE
	CABLE LENGTH(A)			MATING COMPONENTS	

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## PACKAGING



### TE TECHNICAL SUPPORT CENTER

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05/2021