



1575.42 MHz GNSS ACTIVE ANTENNA

Part Number: 2108912-1

FEATURES & BENEFITS

- L1 band for GNSS
- Active Patch Antenna
- The following data is based on 12 x 12mm ground size
- Different cable lengths and connector options available
- No matching circuits required

RF SPECIFICATIONS

Frequency Range (MHz)	1575.42
VSWR	< 2.0:1
System Gain at Zenith @ 5V	Typ. 11.1 dBic
Axial Ratio at Zenith	Typ. 5.1 dB
Average Gain (Cable loss included)	6.3 dBic
Noise Figure	Typ. 1.4 dB @ 5V
Group Delay @ Zenith Variation Across Single Constellation(ns)	13.0
Phase Center Variation PCV (mm) including Active Circuitry	NA
LNA (Voltage & Current)	DC Voltage Range 1.8~3.3V & 4.0mA @3.0V
Feed Point Impedance	50 ohms
Polarization	RHCP

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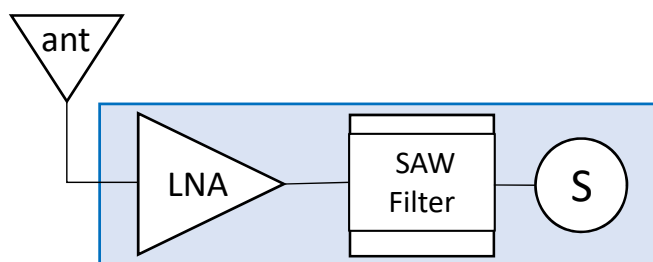
Standard Antenna Solutions

MECHANICAL SPECIFICATIONS

Size	12.0 mm x 12.0 mm x 5.2 mm
Weight	< 2.5 g
Mounting	Adhesive Tape
Mating Connector	MHF-type receptacle (TE PN 2337019-1)
Cable	Coaxial Cable: 1.13mm Dia. (Length : 55±2 mm)
Operating Temperature	-30 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)	1475(F_0-100)	1675(F_0+100)
L1 Atten. (dB)	26.83	26.39
L1 $F_0 = 1575.42$ MHz		



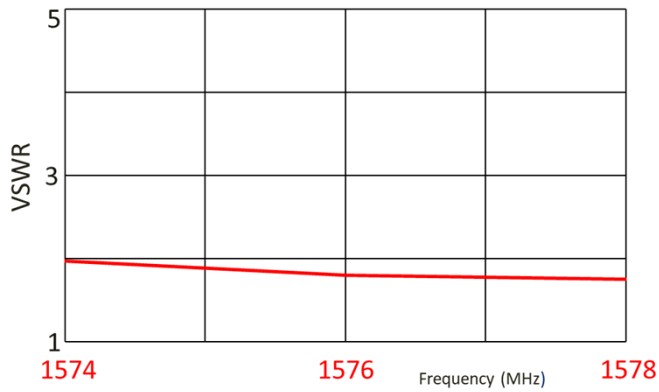
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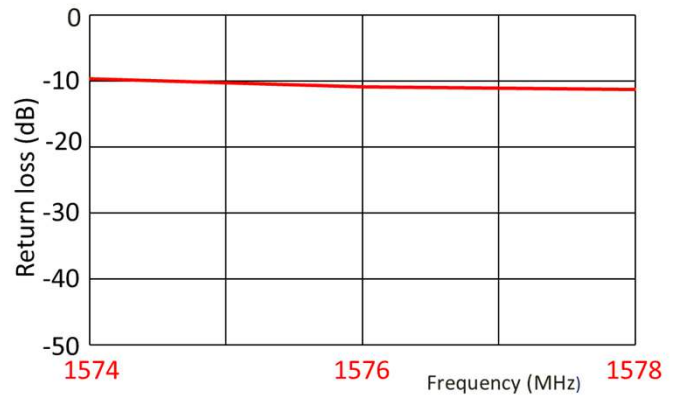
RF DATA

(shown as 2108912-1 : Ground size : 12 x 12 mm, DC 3V & Current 4.0mA.)

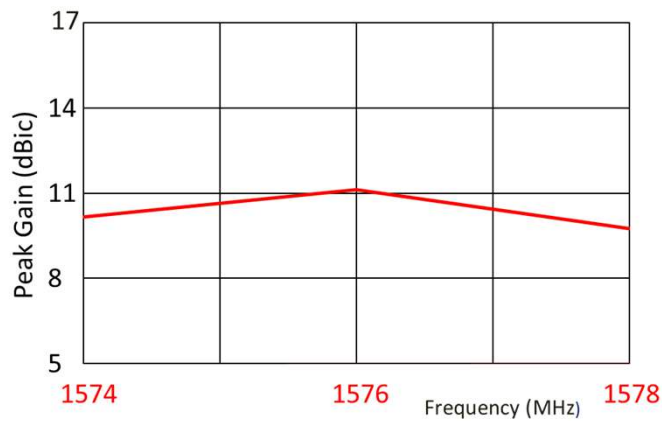
VSWR



Return Loss



Peak Gain



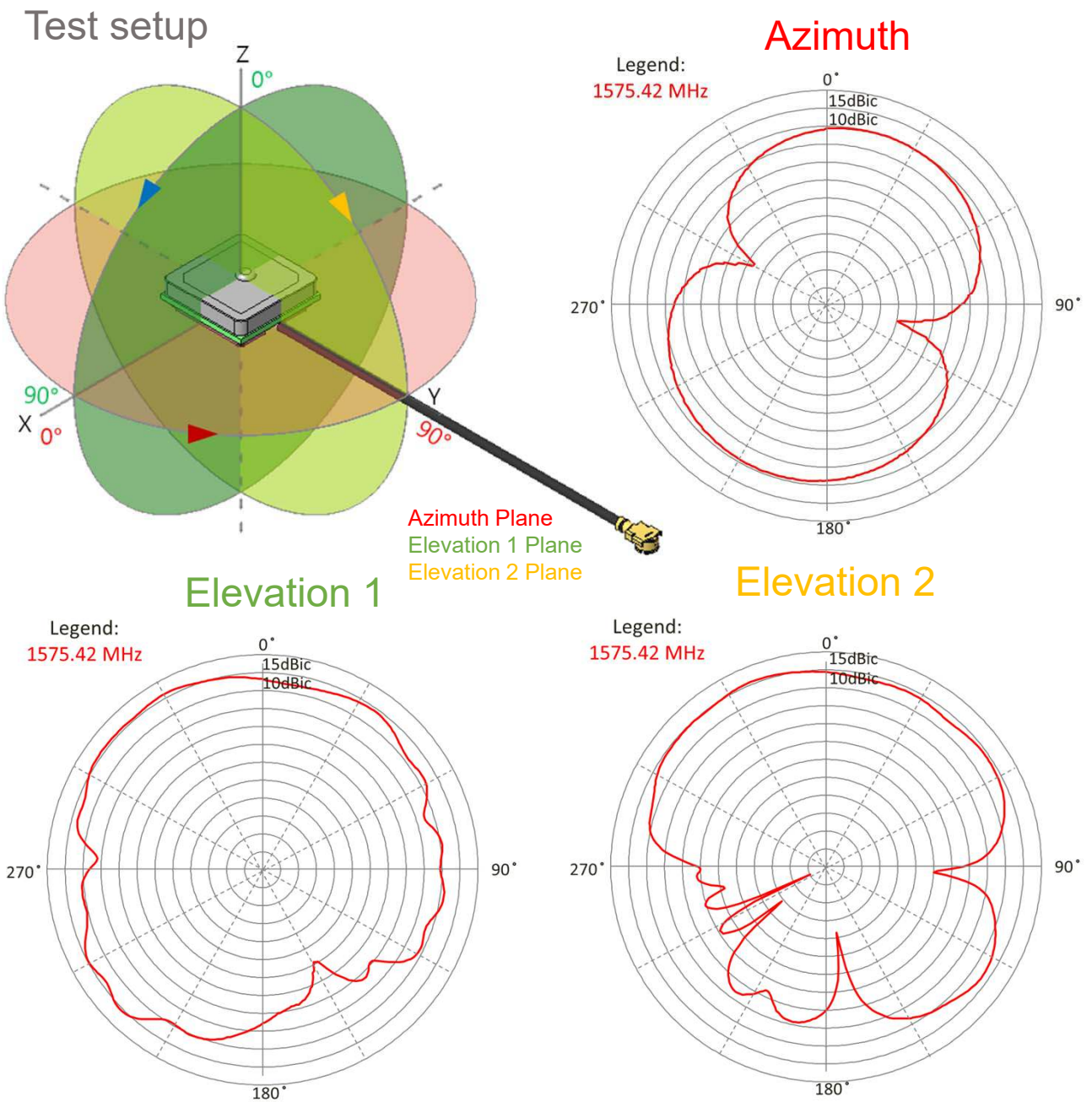
Antenna gain varies with cable length

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RADIATION PATTERN

(shown as 2108912-1 : Ground size : 12 x 12 mm, DC 3V & Current 4.0mA.)

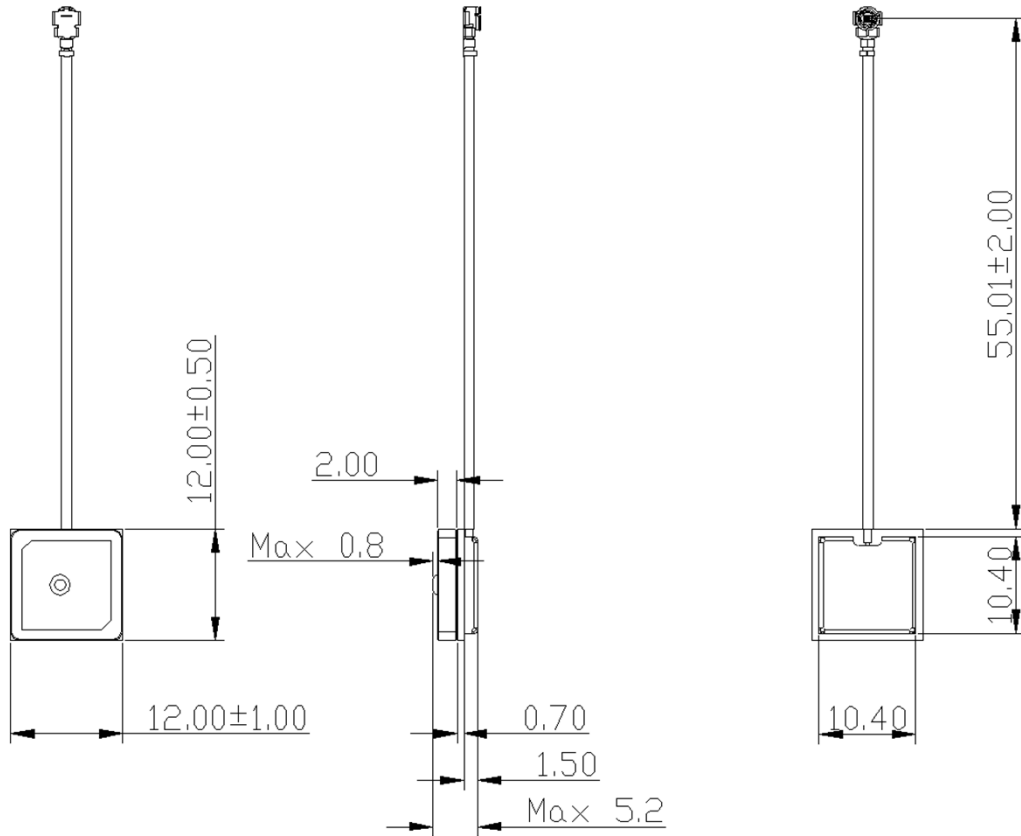


Antenna gain varies with cable length

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DIMENSIONS



Dimension: mm
Diagrams is not to scale

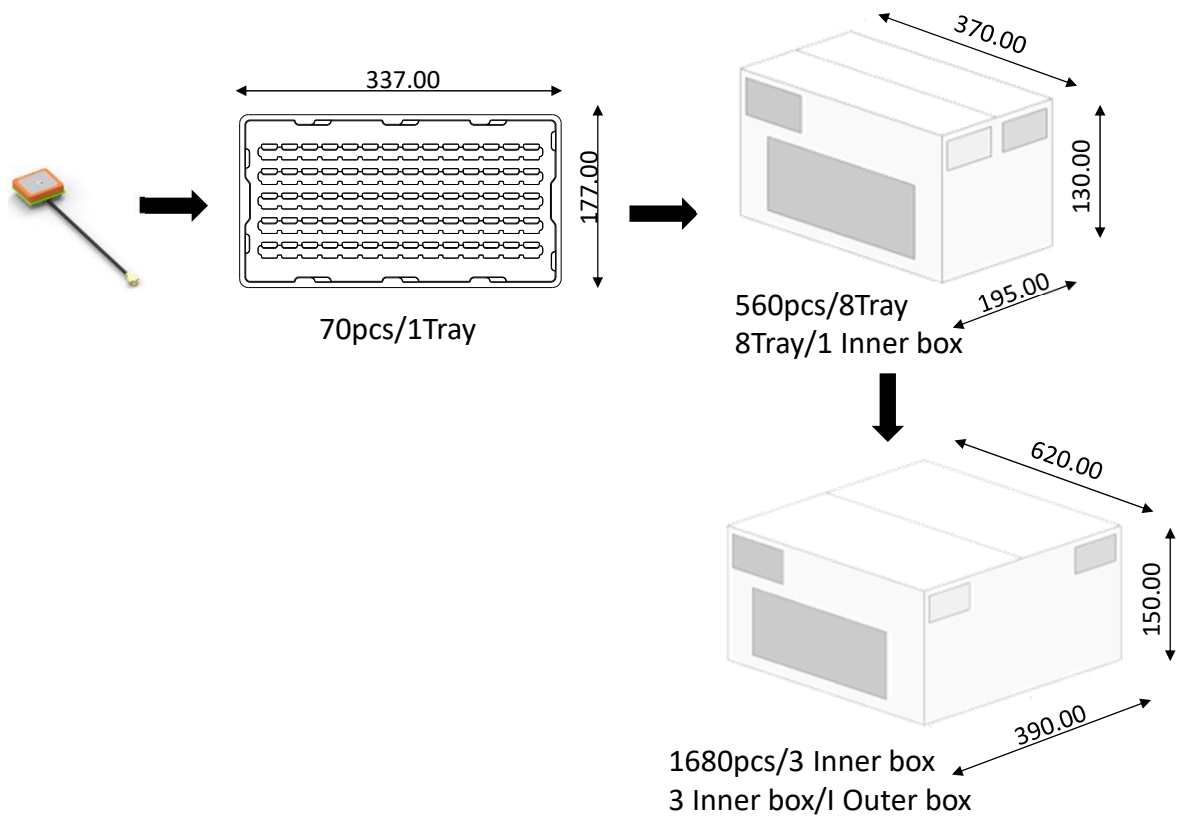
MATING COMPONENTS

2108912-1	55	2.165	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



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05/2021