

# GNSS/ GPS L1+L5/ GLONASS/ BeiDou/ Galileo - Active Stacked Patch Antenna

**APARC2511X-SG3L5**

Request Samples



Check Inventory



25 x 25 x 13 mm

RoHS/RoHS II Compliant

MSL Level = N/A

## Features

- Multiband GNSS Coverage – GPS/GLONASS/BeiDou/Galileo
- RHCP polarization
- Easy installation using IPEX Connector (Customizable Cable and Connector Options)
- High gain LNA

## Applications

- GNSS – GPS L1+L5/GLONASS/BeiDou/Galileo
- IoT
- M2M
- Remote Monitoring
- Geofencing
- Surveying and Mapping Systems
- Logistics and Tracking

## Electrical Specifications

Parameter	Specification				Unit	Note
	L1:BeiDou	L1:GPS/Galileo	L1:GLONASS	L5		
Operating Frequency	1561±2.046	1575.42±1.023	1602±8	1176±10	MHz	
VSWR	6.12	1.50	1.95	2.74		
Gain	-2	0	2	-2	dBi	Zenith
Impedance	50				Ω	
Polarization	RHCP					
Radiation Pattern	Omni-directional					Azimuth
<b>LNA</b>						
Noise Figure	1				dB	(25°C±5°C)
Gain	28±3		27±3		dB	(25°C±5°C)
Impedance	50				Ω	
VSWR	2.0					Max

## Mechanical Specification

Parameter	Specification
Antenna Dimension	25*25*13mm
Mounting Type	Surface Mount
RF Connector	IPEX (Female)
RF Cable*	Ø1.13±0.1 mm, L = 100 ± 10 mm

\*Note : Cable Loss = Max.(-1.4dB/meter)

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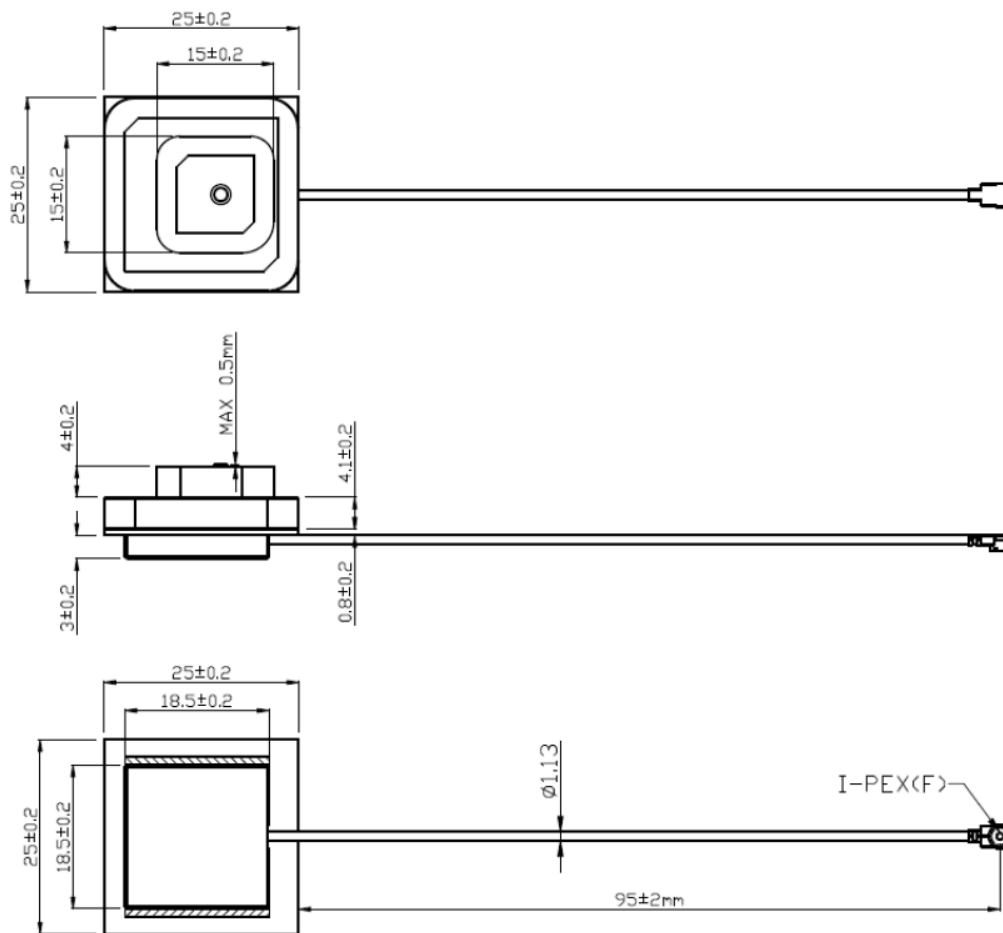
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## Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
RoHS Compliance	Yes
PB Free	No
MSL	NA
ESD Sensitive	Yes

## Product Dimension



Unit : mm

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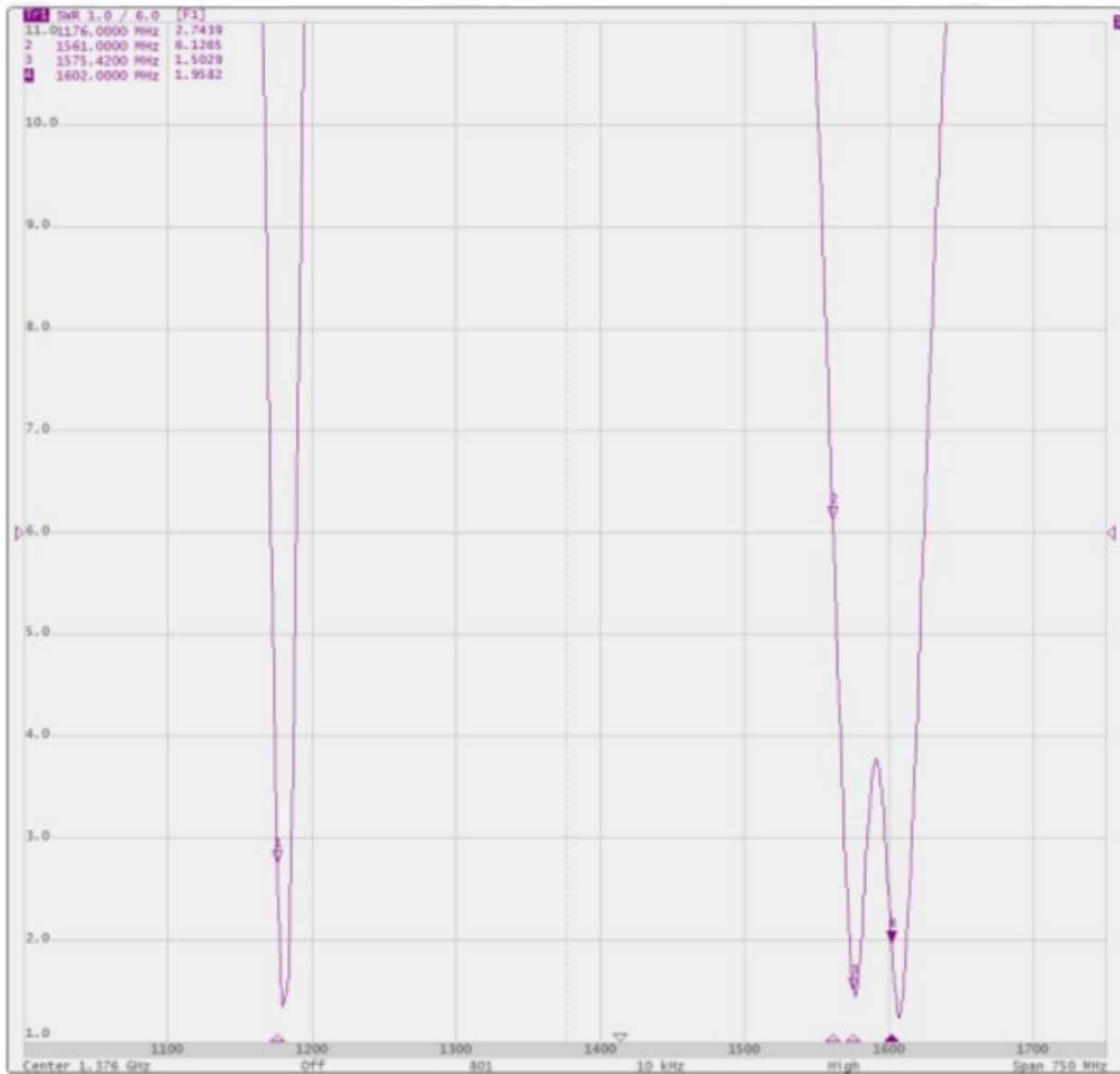


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## Test Measurement –Antenna: Impedance Characteristics



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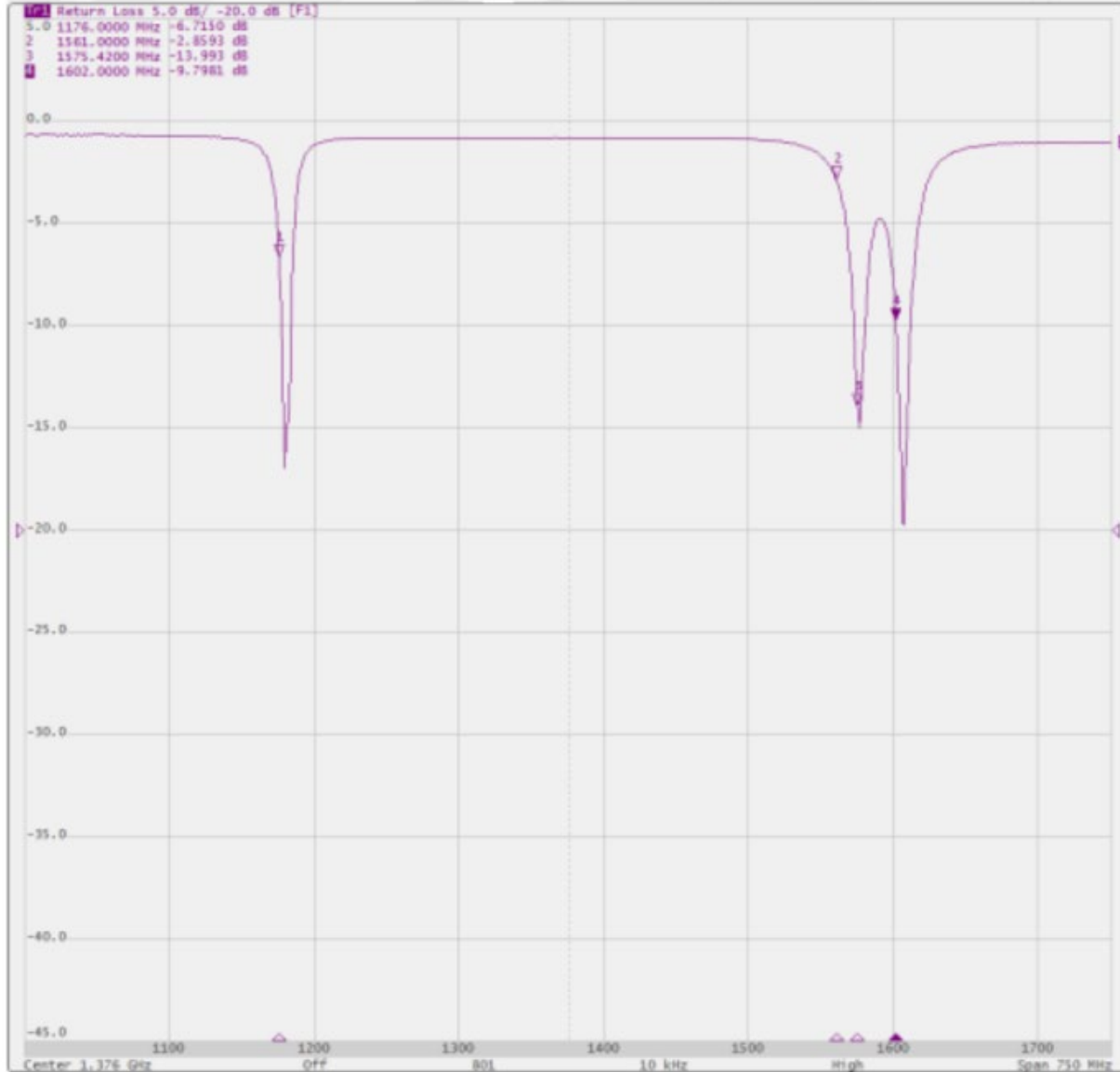
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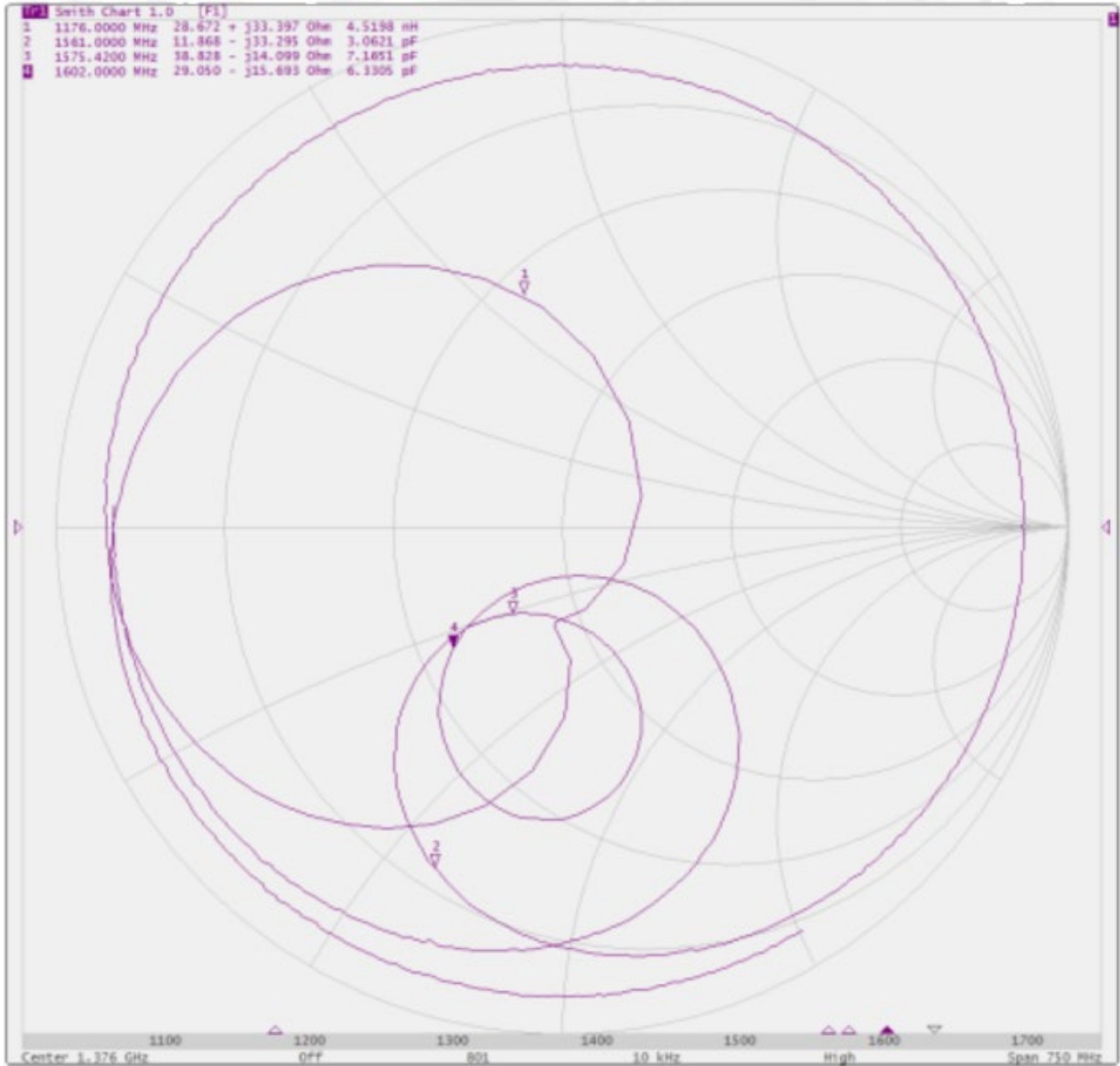
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REVISED: 02-03-20

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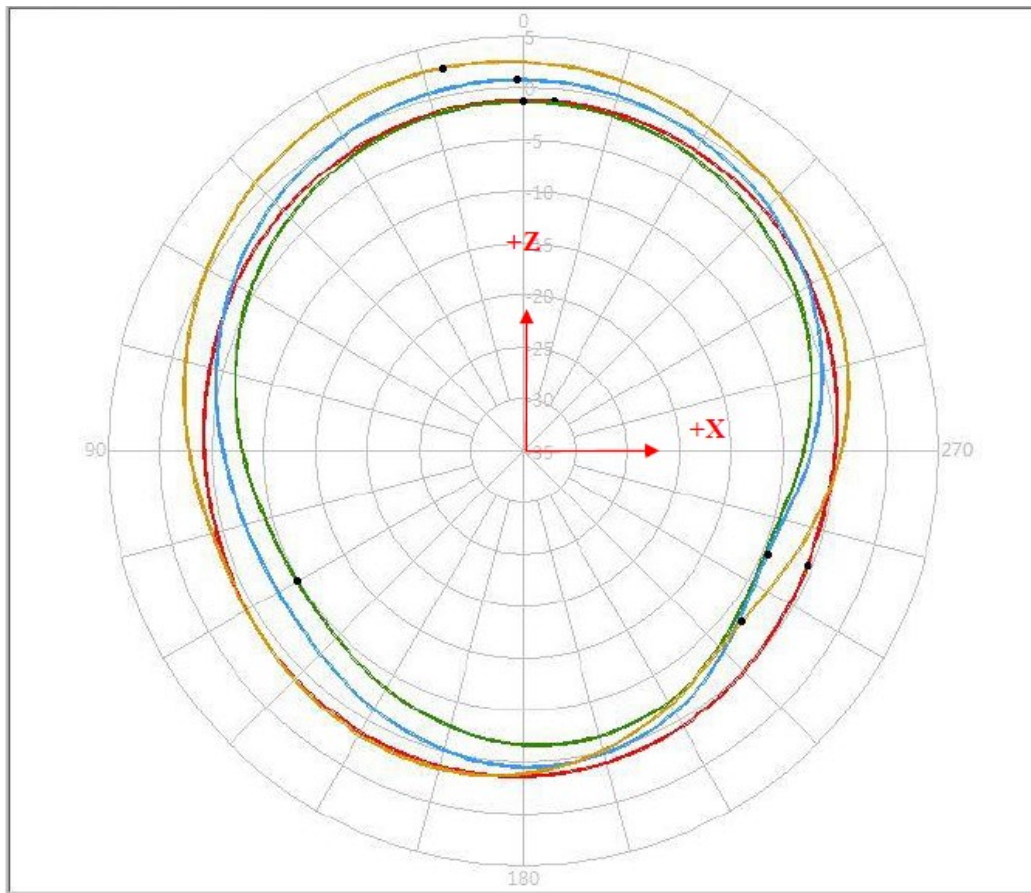
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## Radiation Characteristics

### XZ-Plane



Frequency (MHz)	Peak Gain (dBi)	Average Gain (dBi)
1176 MHz	-1.23	-3.25
1561 MHz	-1.37	-5.12
1575.42 MHz	0.72	-3.28
1602 MHz	2.65	-1.27

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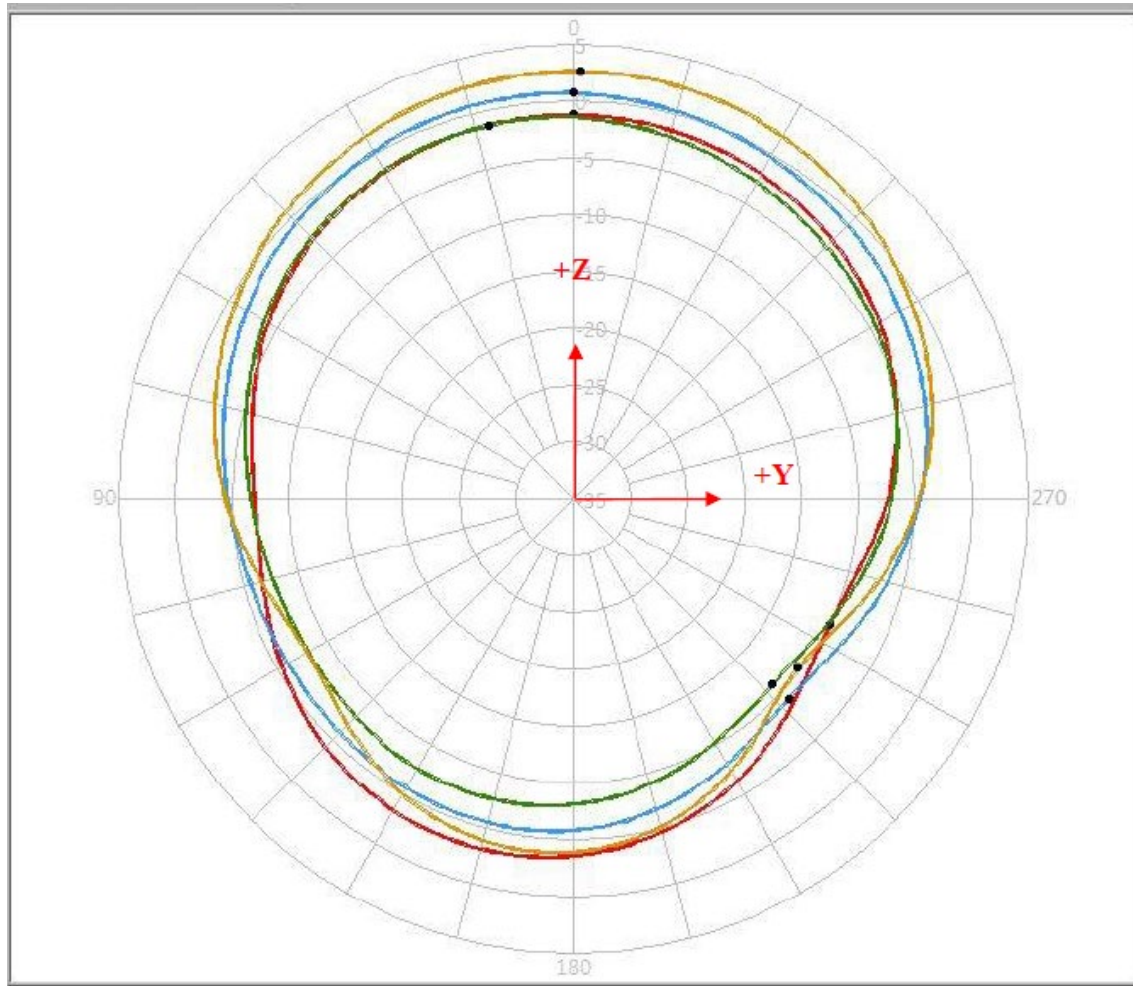


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## YZ- Plane



Frequency (MHz)	Peak Gain (dBi)	Average Gain (dBi)
1176 MHz	-1.23	-4.05
1561 MHz	-1.34	-5.03
1575.42 MHz	0.73	-2.85
1602 MHz	2.66	-1.54



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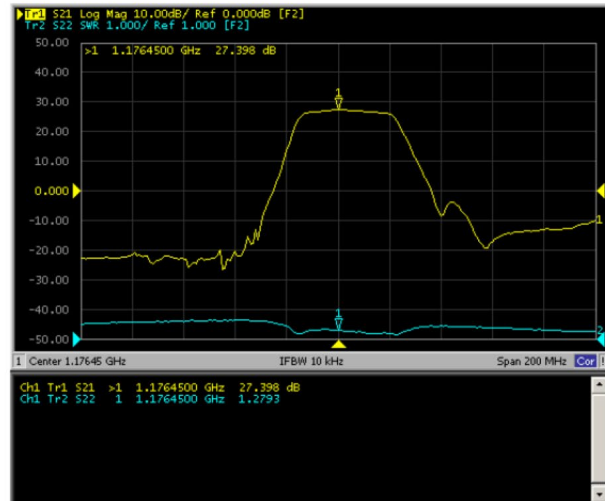
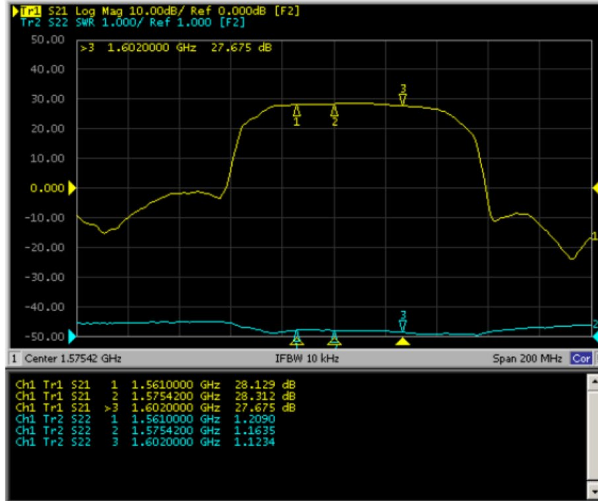


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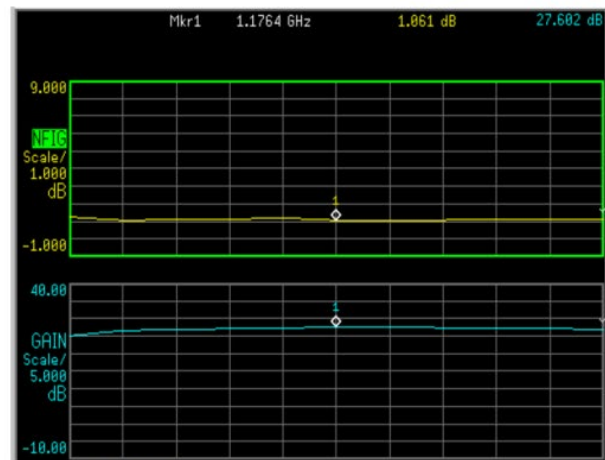
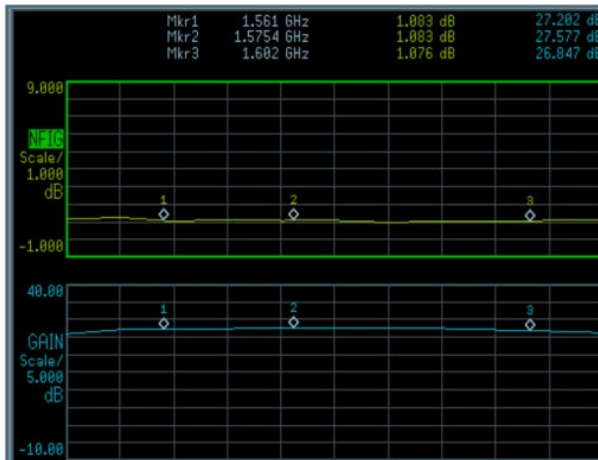
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## Test Measurements-LNA: Gain, Noise figure



LNA Gain @3.3V



LNA Noise Figure @3.3V



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## Packaging Information

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Number of Antenna/ Carton : 450

Dimension of the Carton : 390 x 320 x 290 mm

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