

Part No. 1005620 GPS L1 & L5 Ceramic Patch Antenna

1584 MHz & 1176 MHz

Supports: GNSS systems, Global antenna embedded systems, Satellite positioning systems



KYOCERA AVX antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. This antenna is mounted using double sided adhesive and through-hole solder pin. These innovative antennas provide compelling advantages for GPS L1 & L5 enabled devices.

GPS L1 & L5 Ceramic Patch Antenna

1584 MHz & 1176 MHz

KEY BENEFITS

Reduced Costs and Time-to-Market

Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

Quicker Time-to-Market

By optimizing antenna size, performance and emissions, customer and regulatory specifications are more easily met.

Environmental Compliance

Products are the latest RoHS version compliant.

APPLICATIONS

- M2M / IoT devices
- Security (Defense, Marine)
- Telematics devices
- Agriculture
- Geo-tracking
- Autonomous Vehicles
- Vehicle tracking/fleet management systems,
- Navigation devices
- Fitness trackers

Electrical Specifications

Typical Characteristics, on 70 x 70 mm ground plane

Frequency	GPS L1 1584 ± 2 MHz	GPS L5 1176 ± 2 MHz
Center Frequency f_0	1584 MHz	1176 MHz
Return Loss	< -10 dB	< -10 dB
Zenith Gain	3.3 dBic	0.4 dBic
Axial Ratio	< 3 dB	
Polarization	R.H.C.P	
Impedance	50 Ω	

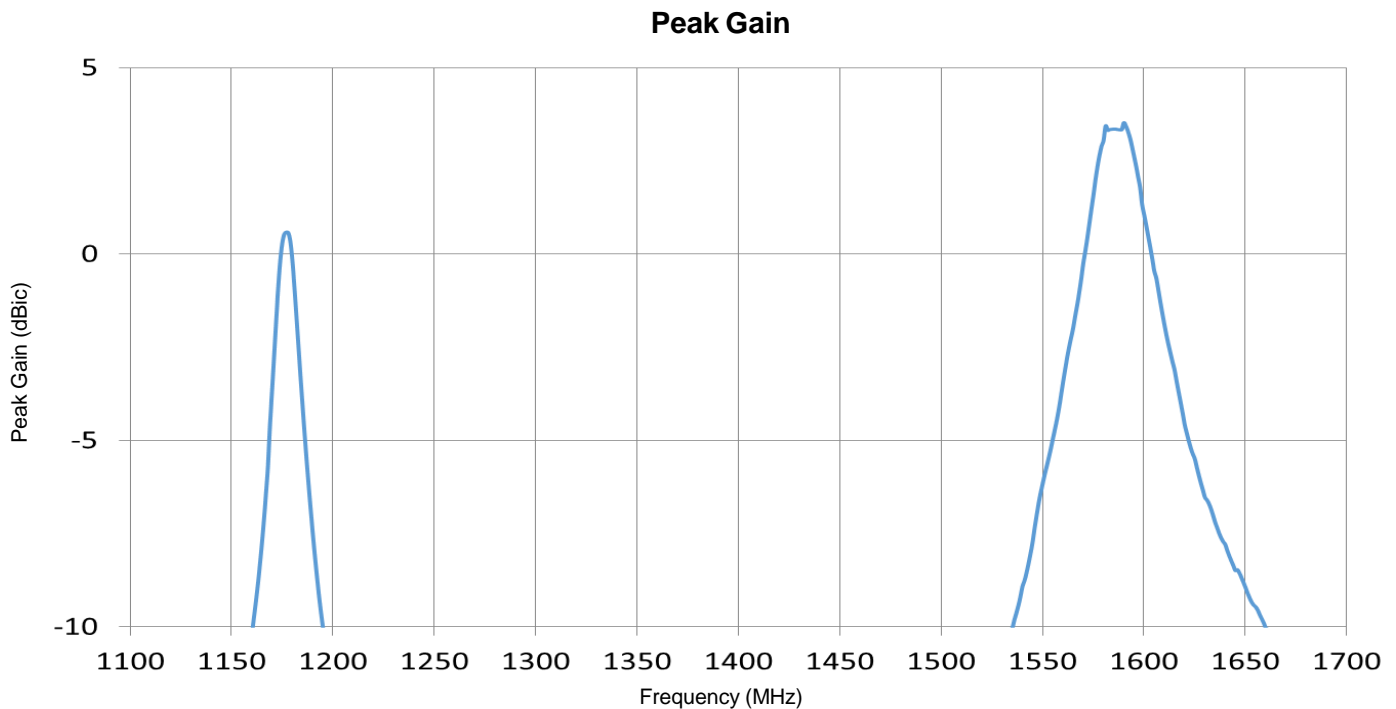
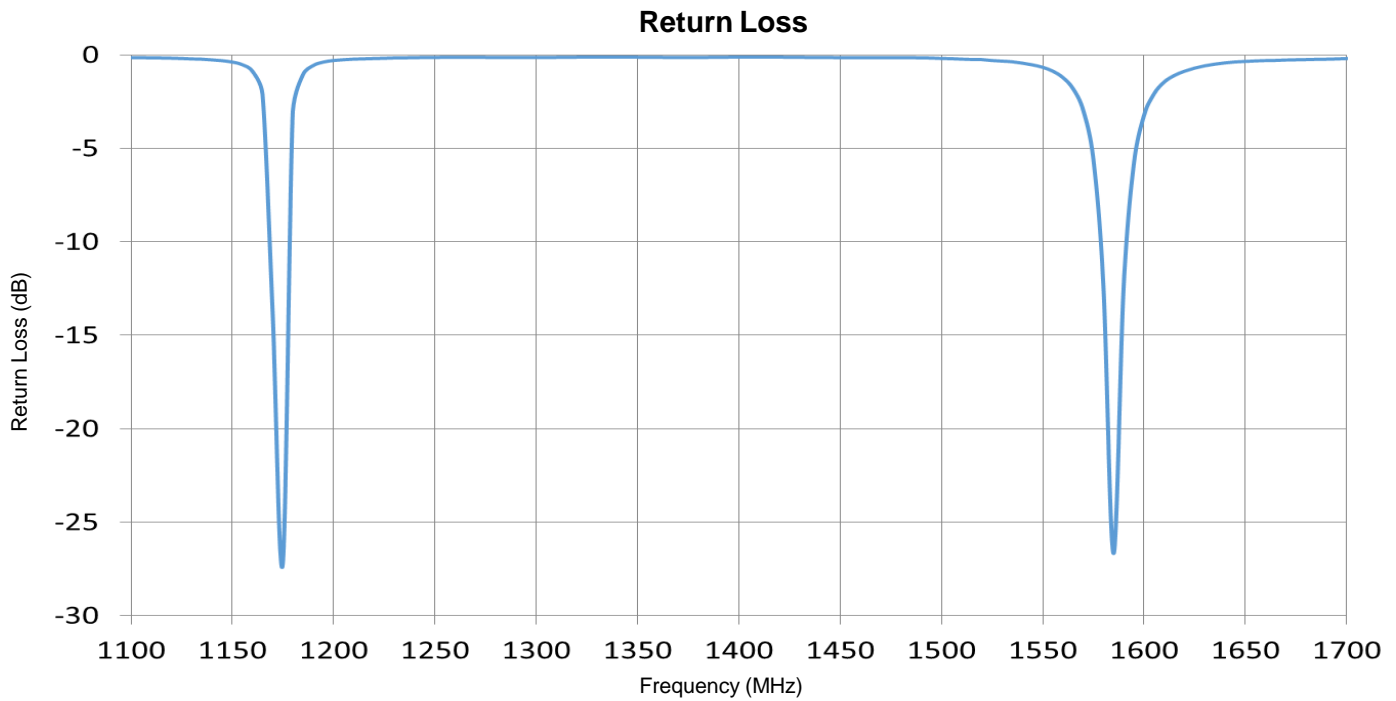
Mechanical Specifications & Ordering Part Number

Ordering Part Number	1005620
Size (mm)	25.0 x 25.0 x 4.16 (Overall) 20 x 20 x 2.0 (Top Patch)
Mounting	Adhesive tape and solder pin
Weight (grams)	9.6
Packaging	Plastic Tray

GPS L1 & L5 Ceramic Patch Antenna Specifications.
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

Return Loss and Peak Gain Plots

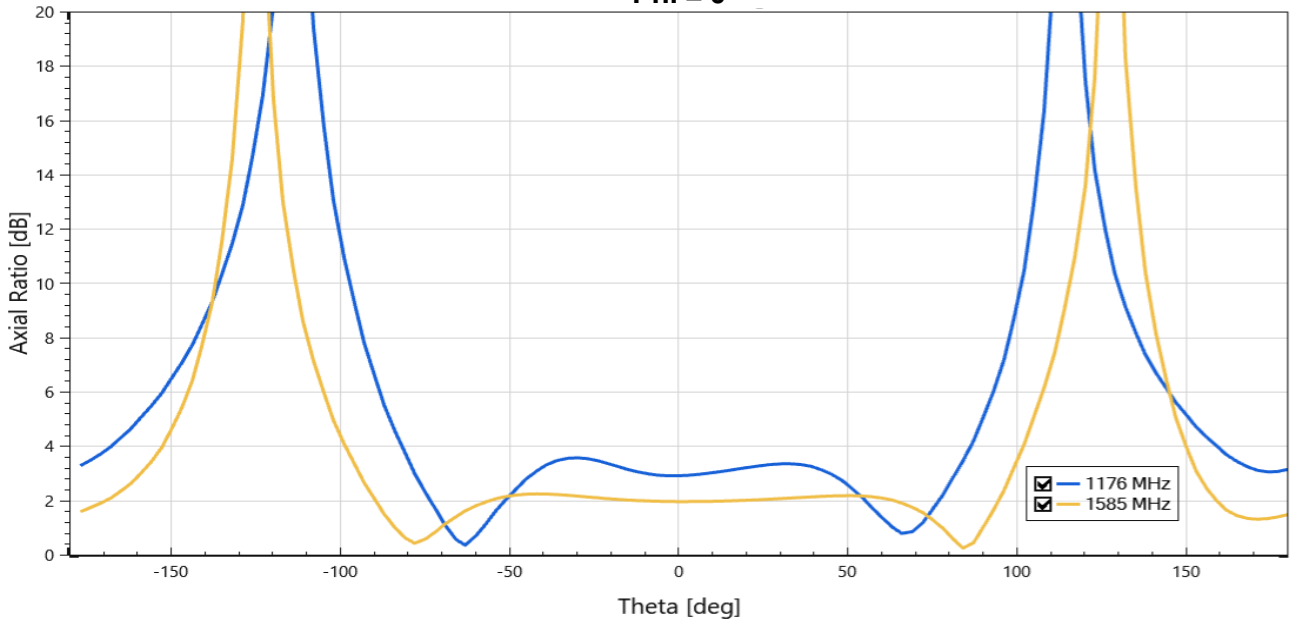
Typical performance on 70 x 70 mm PCB



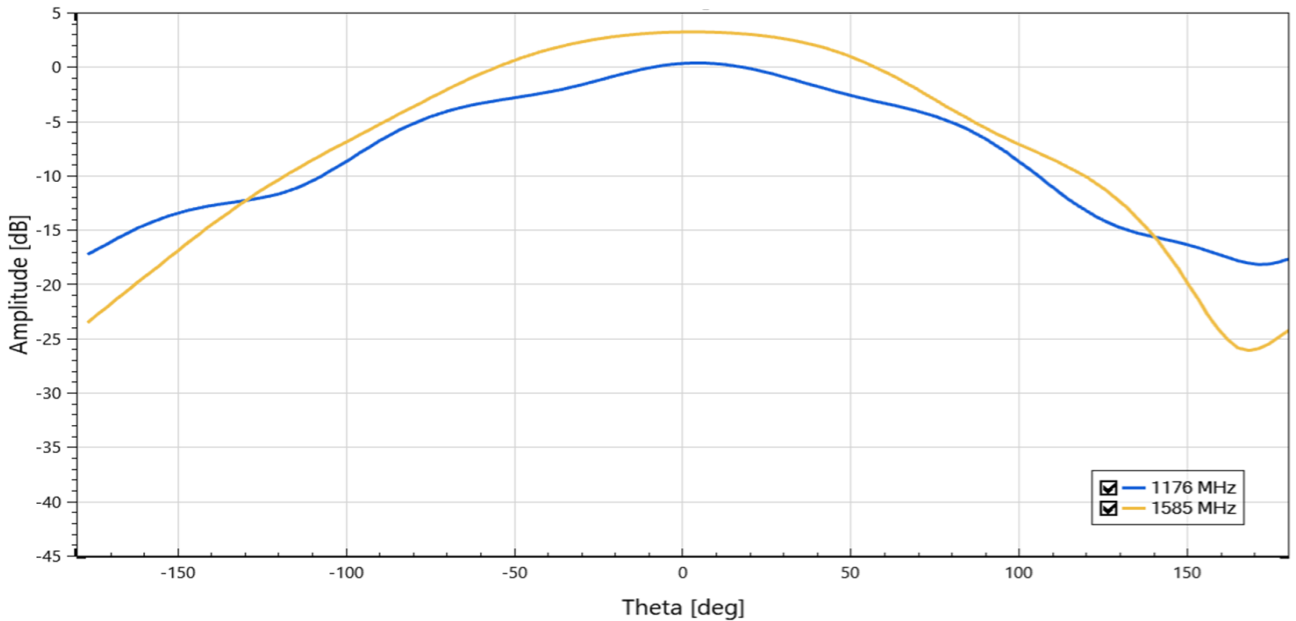
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Axial Ratio, R.H.C.P Plots
 Typical performance on 70 x 70 mm PCB
 Measured @ 1176 MHz and 1585 MHz

**Axial Ratio
 Phi = 0**



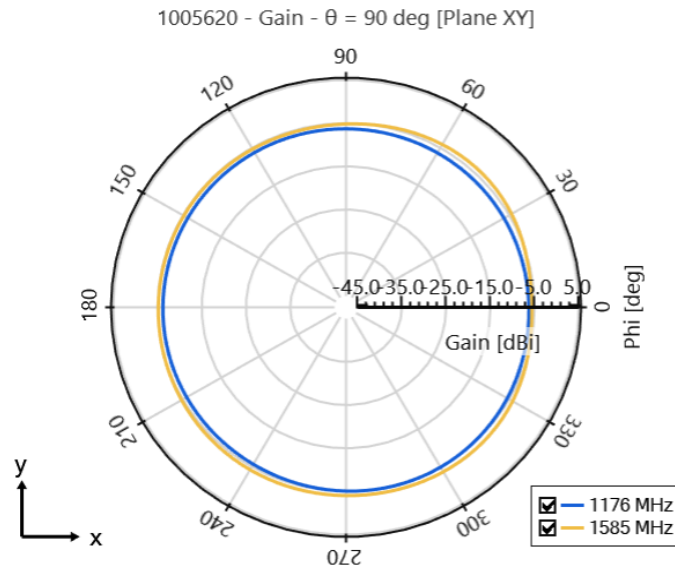
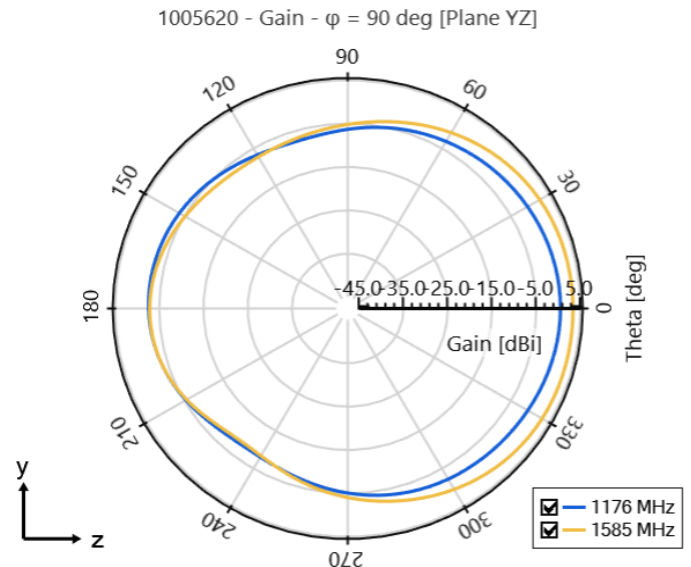
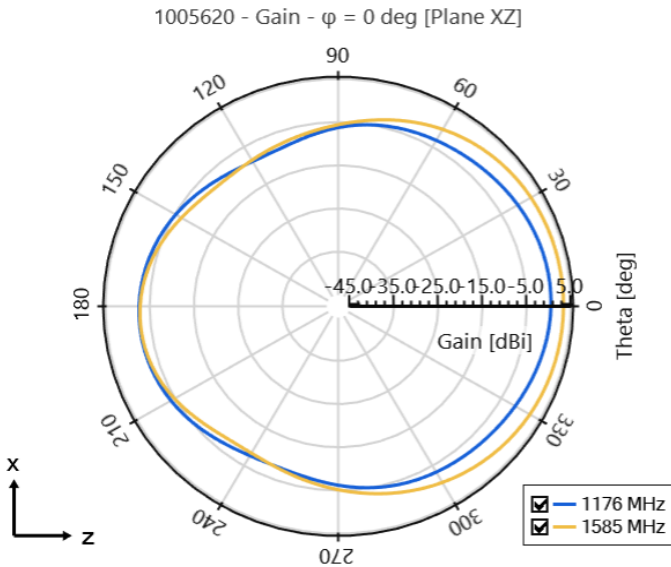
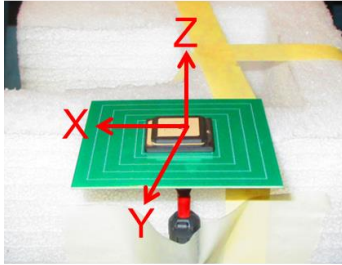
R.H.C.P.



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Antenna Radiation Patterns

Typical performance on 70 x 70 mm PCB
 Measured @ 1176 MHz and 1585 MHz

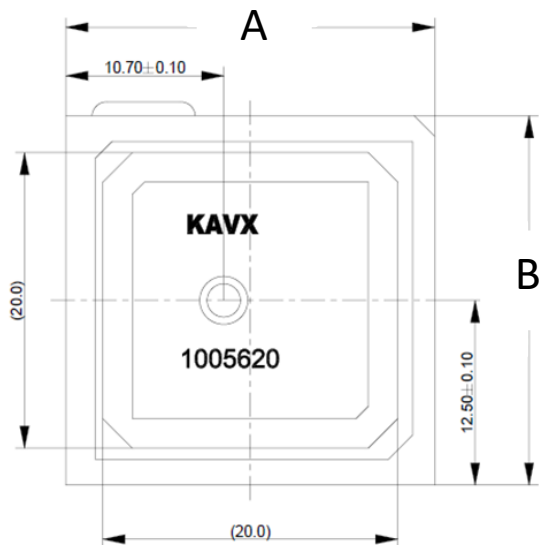


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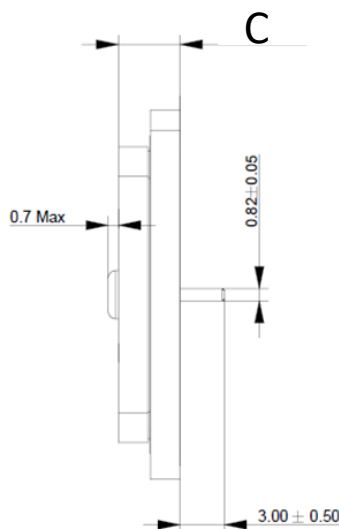
Mechanical Dimensions

Typical antenna dimensions (mm)

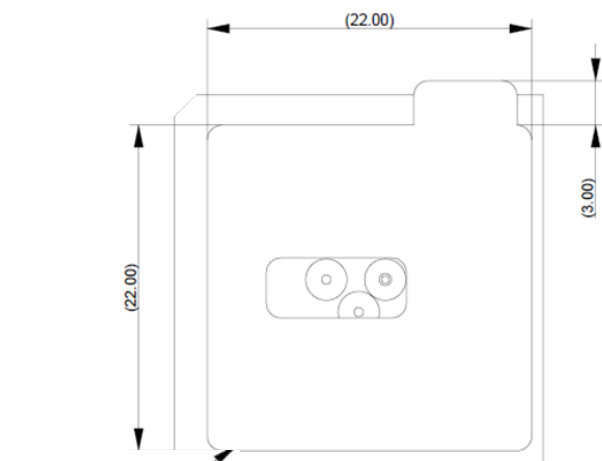
Part Number	A	B	C
1005620	25.00 ± 0.20	25.00 ± 0.20	4.16 ± 0.50



Top View



Side View



**Adhesive Liner View
(Bottom)**