

# Part No. 1001039

## GPS Ceramic Patch Antenna

1.575 GHz

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. These innovative antennas provide compelling advantages for GPS enabled handheld devices, media players and other mobile devices.

### GPS Ceramic Patch Antenna

1.575 GHz

#### 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

- Embedded design
- POS, Gateway, Access Point
- Handheld Smart Grid
- OBD-II
- Telematics Tracking
- Healthcare Applications (FDA ClassI)
- M2M, Industrial devices

#### Electrical Specifications

Typical Characteristics, on 70 x 70 mm ground plane

Frequency	1.575 GHz
Center Frequency $f_0$	1575 $\pm$ 3.0 MHz
Return Loss	< -20 dB
Gain 0° XZ-Plane	5.3 dBic
Polarization	R.H.C.P
Impedance	50 ohm
Axial Ratio	1.8 dB

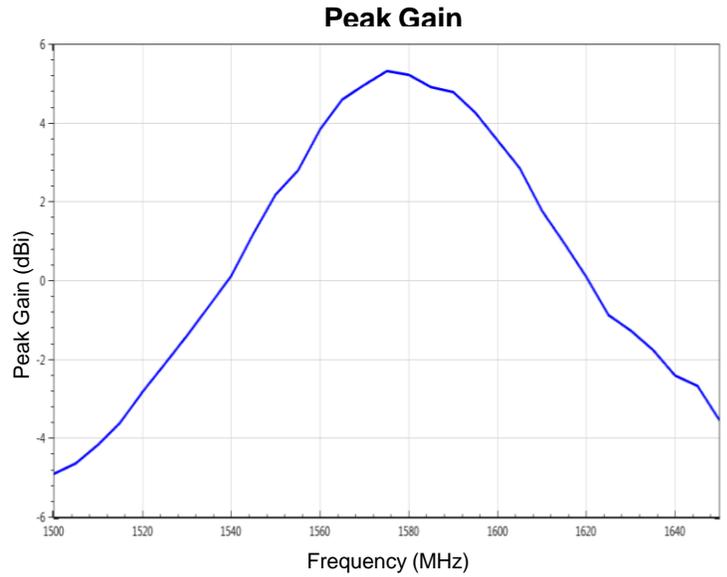
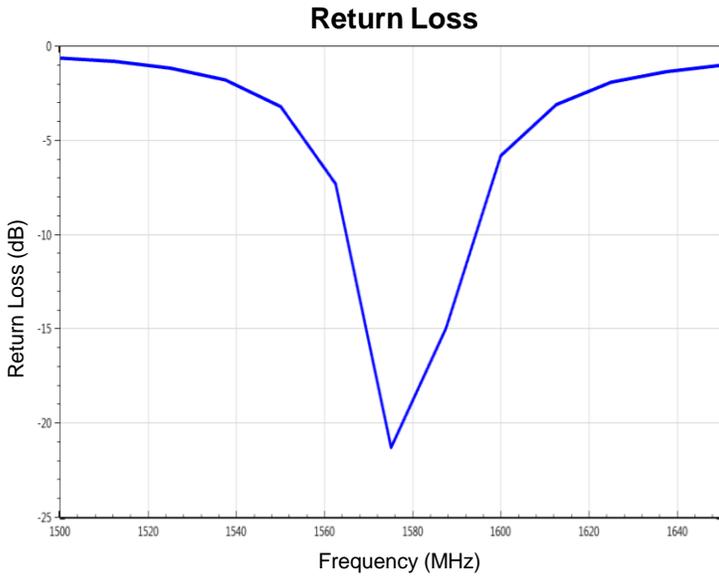
#### Mechanical Specifications & Ordering Part Number

Ordering Part Number	1001039
Size (mm)	25.0 x 25.0 x 4.0
Mounting (mm)	Adhesive Tape and Soldered Pin
Weight (grams)	9.4
Packaging	Plastic Tray
Additional Resources	<a href="#">Download 3D FIT File</a>

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

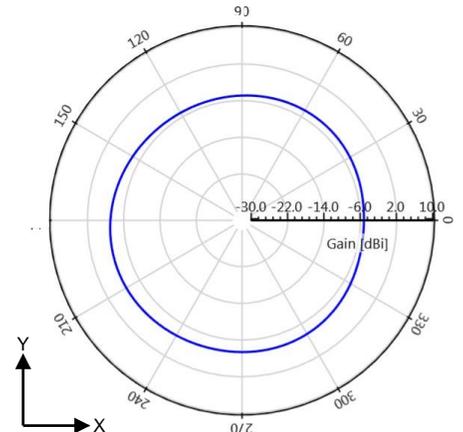
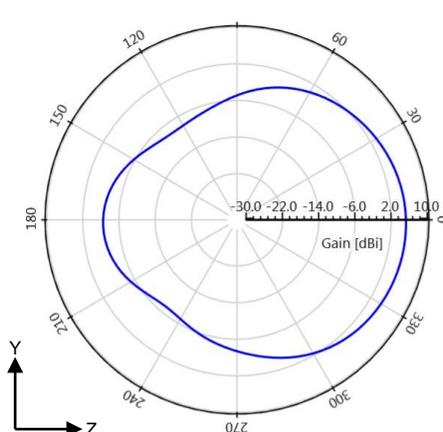
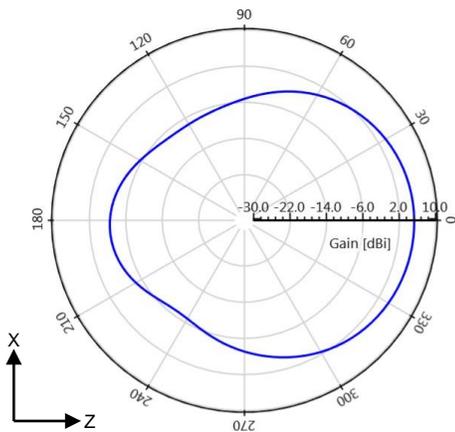
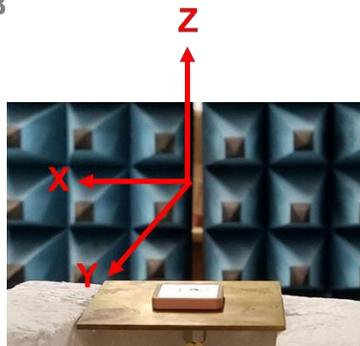
**VSWR and Peak Gain Plots**

Typical performance on 70 x 70 mm PCB



**Antenna Radiation Patterns**

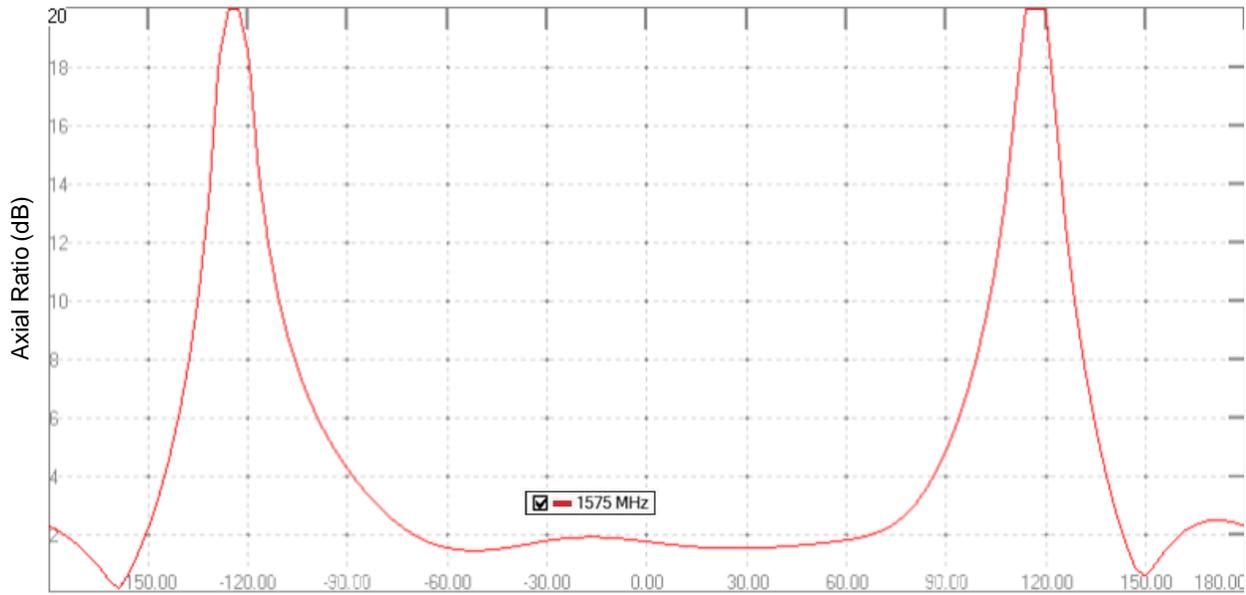
Typical performance on 70 x 70 mm PCB  
 Measured @ 1575 MHz



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**Axial Ratio, RHCP, LHCP Plots**  
 Typical performance on 70 x 70 mm PCB  
 Measured @ 1575 MHz

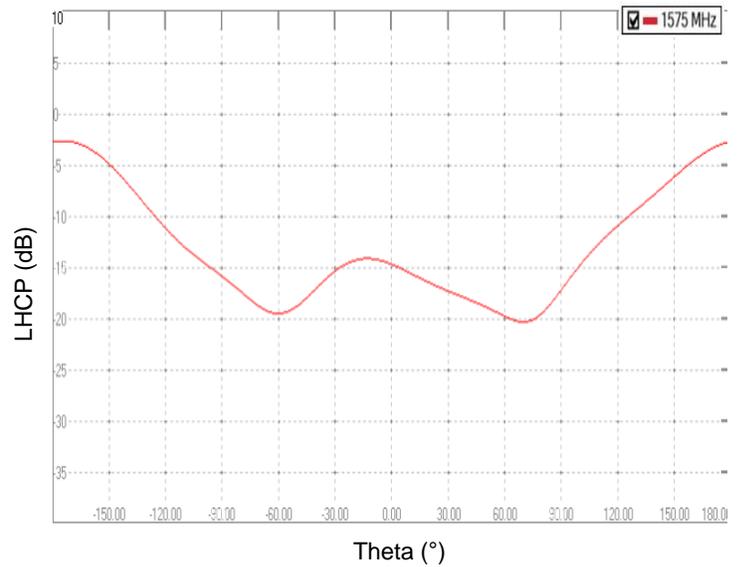
Phi = 0



RHCP



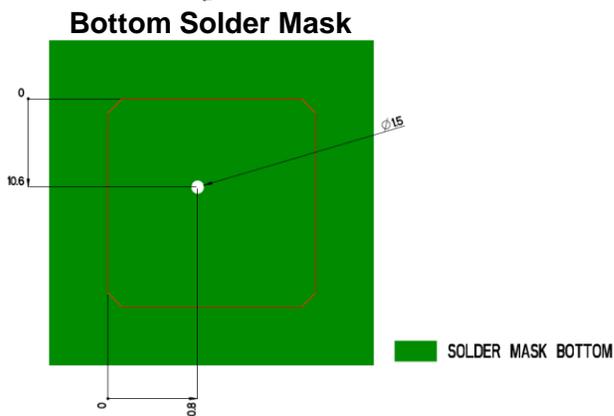
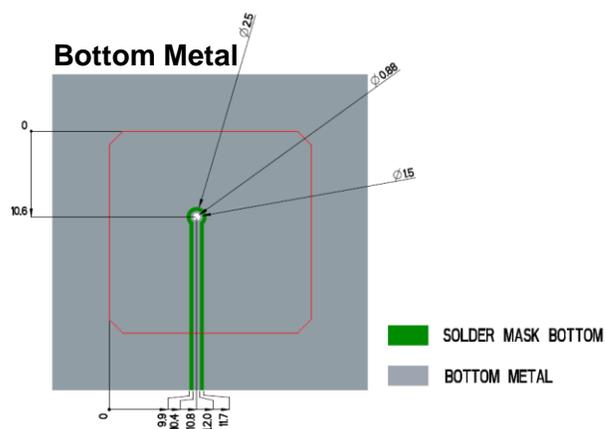
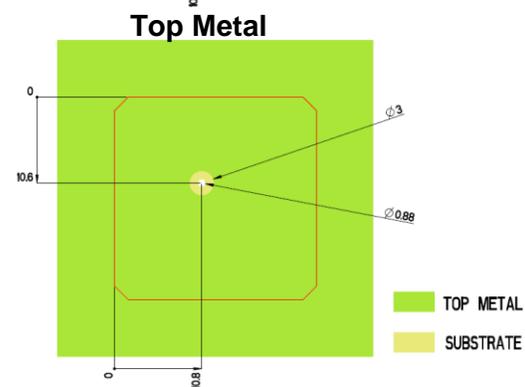
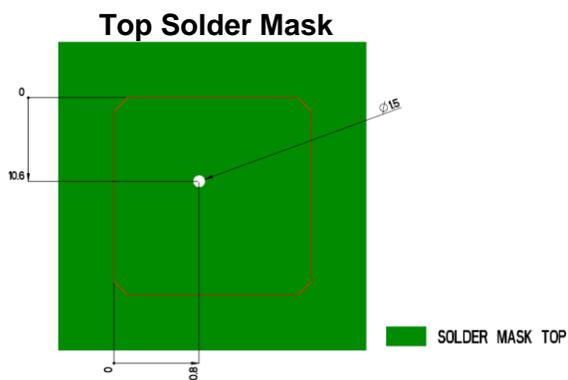
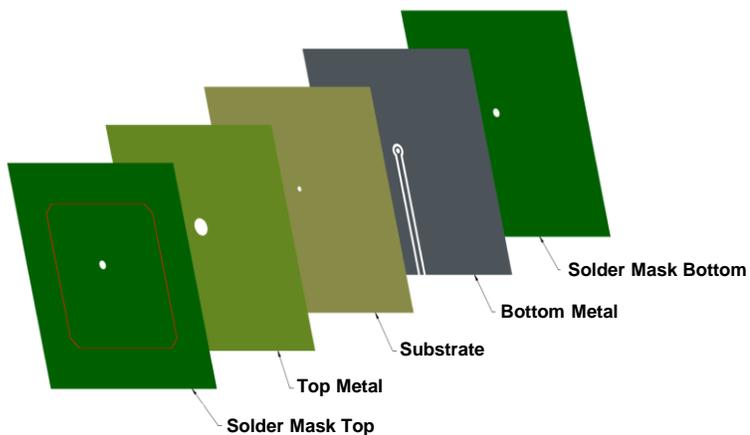
LHCP



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### Antenna Layout

Typical Layout Dimensions (mm)

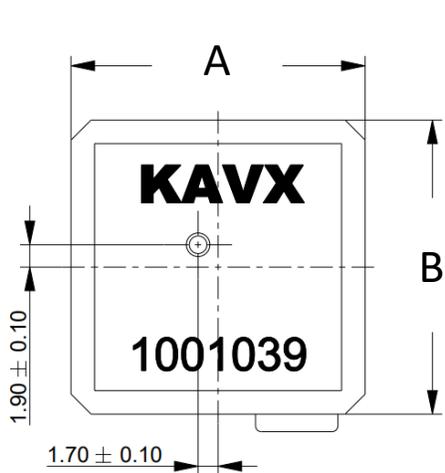


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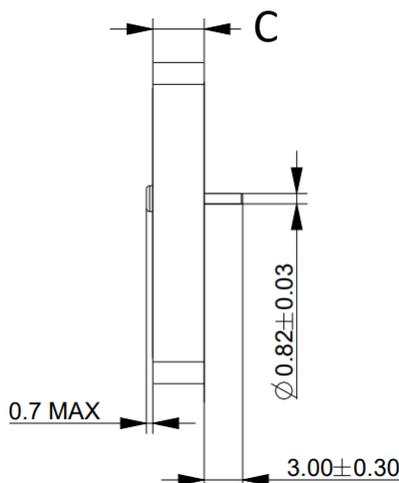
**Mechanical Dimensions**

Typical antenna dimensions, in mm.

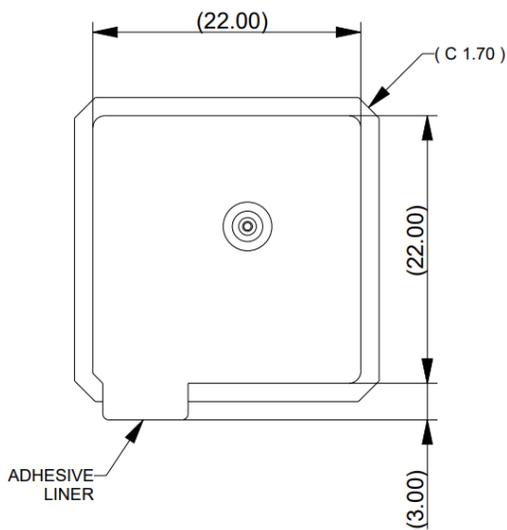
Part Number	A (mm)	B (mm)	C (mm)
1001039	25.0 ± 0.2	25.0 ± 0.2	4.0 ± 0.2



**Top View**



**Side View**



**Bottom View**

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### Additional Resources – 1001039

**3D FIT File:**

[https://www.kyocera-avx.com/download/antennas/ME-FIT/1001039\\_ME\\_fit.zip](https://www.kyocera-avx.com/download/antennas/ME-FIT/1001039_ME_fit.zip)