

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

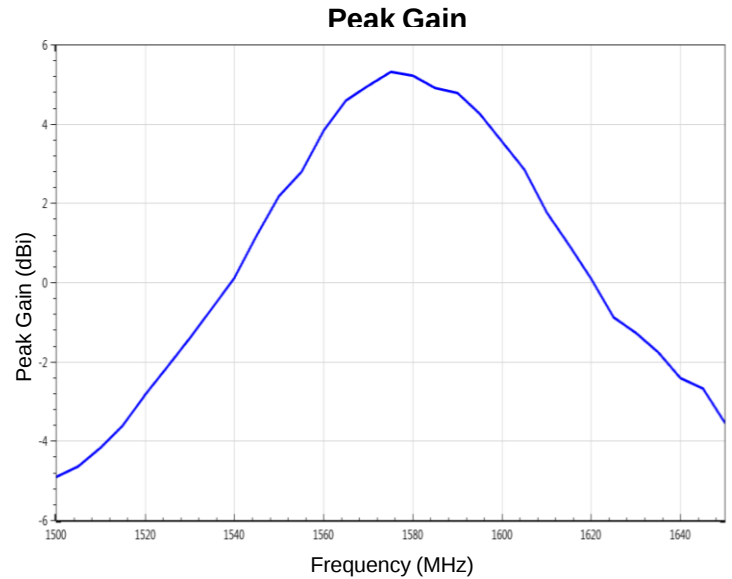
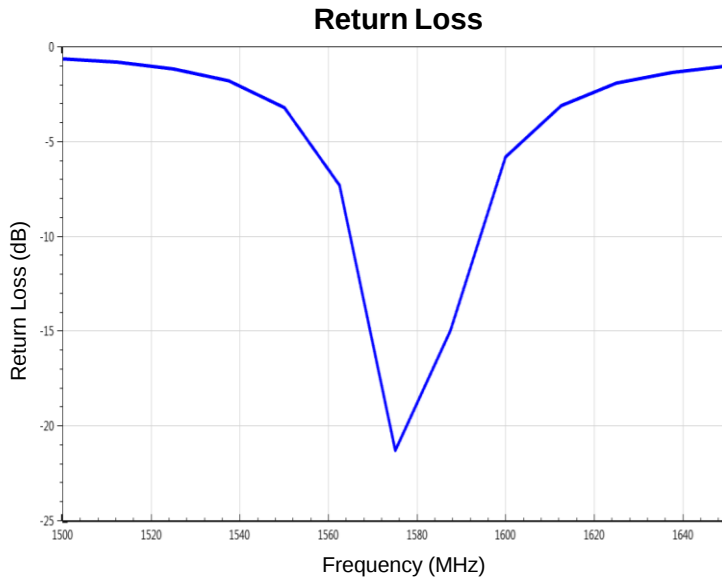
Mechanical Specifications & Ordering Part Number

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	Download 3D FIT File

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

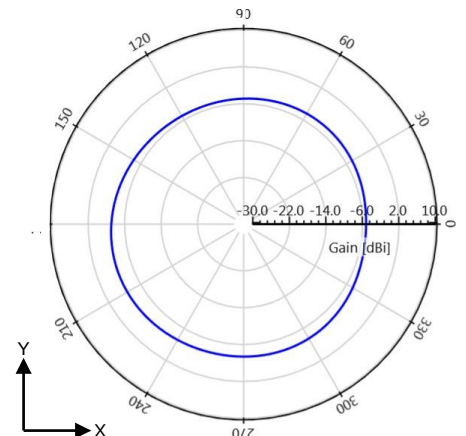
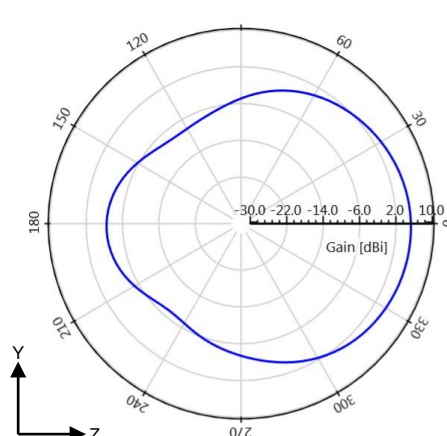
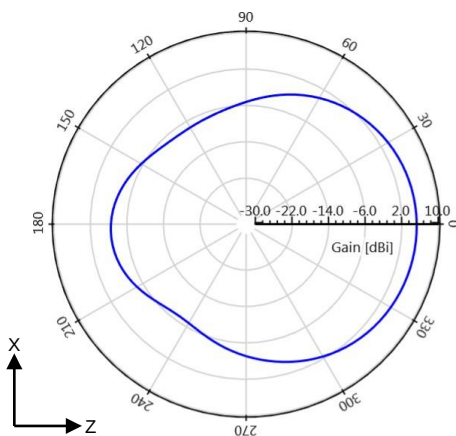
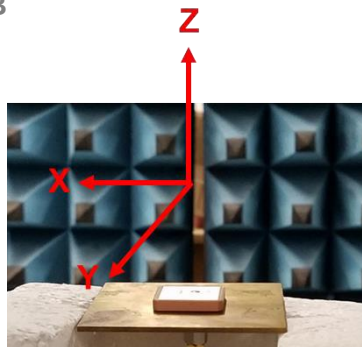
VSWR and Peak Gain Plots

Typical performance on 70 x 70 mm PCB



Antenna Radiation Patterns

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



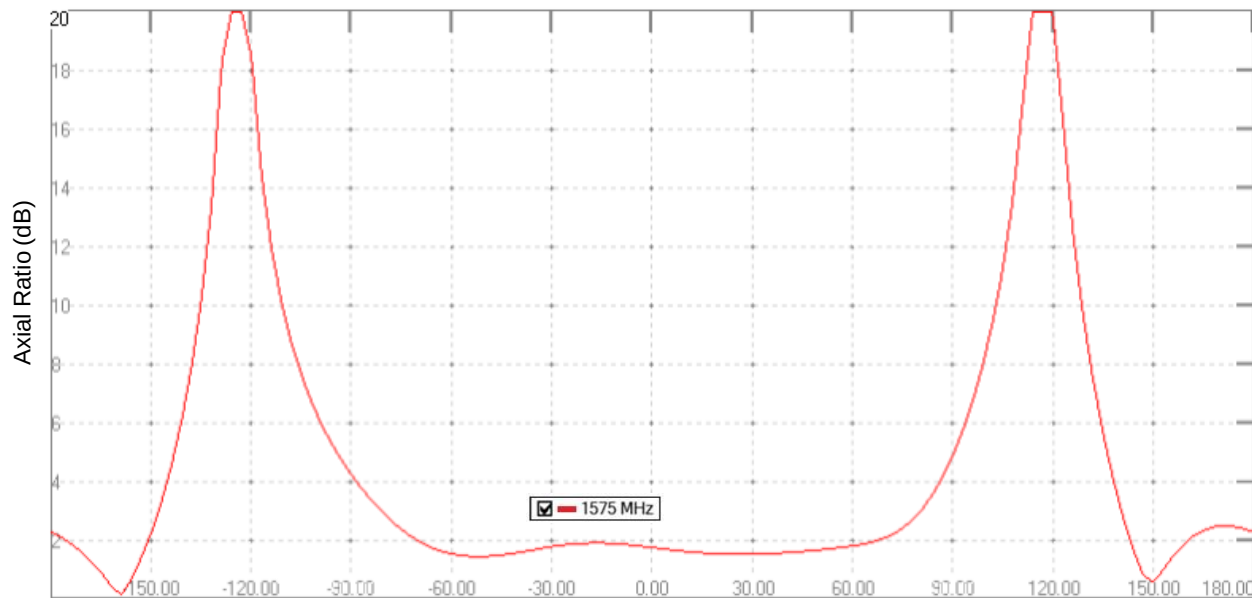
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Axial Ratio, RHCP, LHCP Plots

Typical performance on 70 x 70 mm PCB

Measured @ 1575 MHz

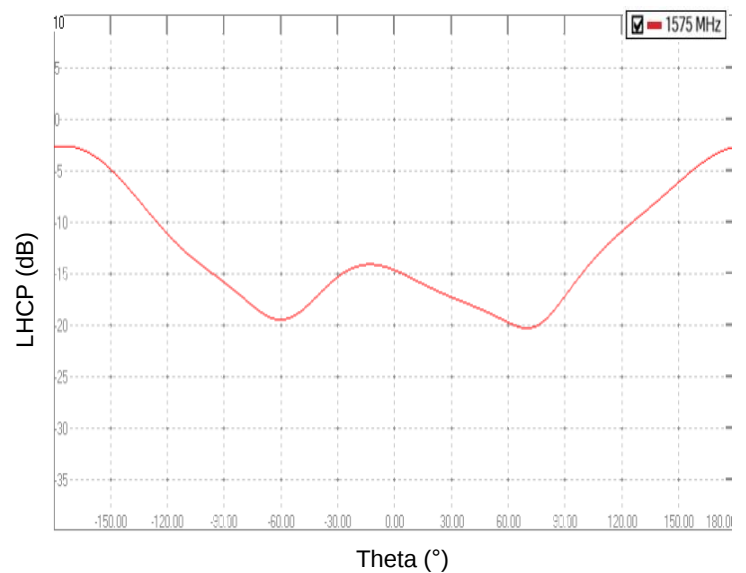
Phi = 0



RHCP



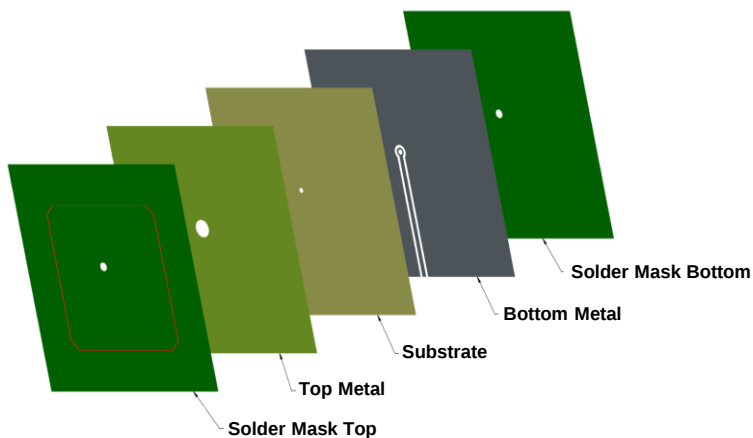
LHCP



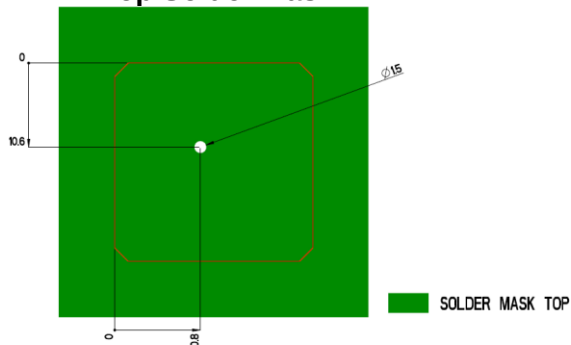
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Antenna Layout

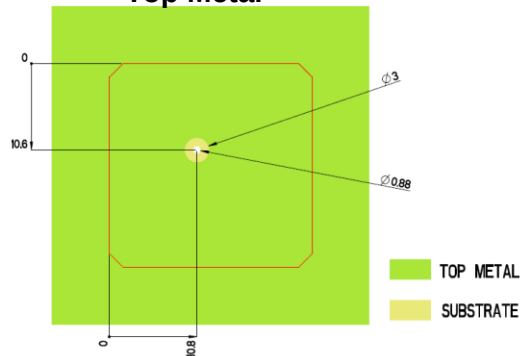
Typical Layout Dimensions (mm)



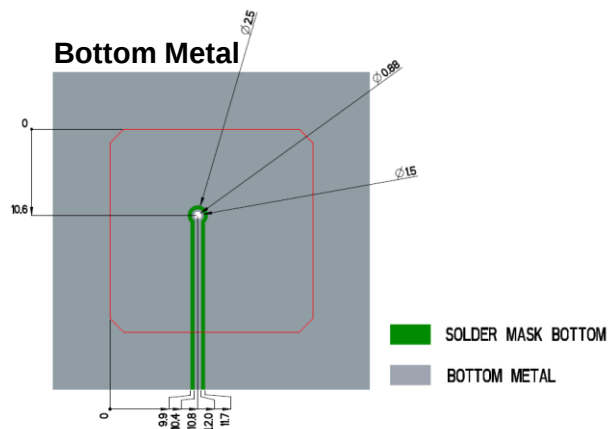
Top Solder Mask



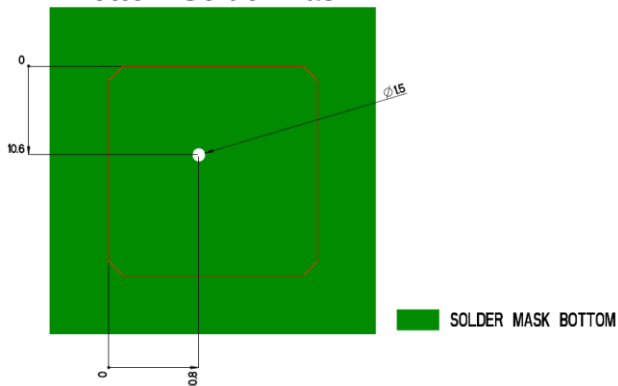
Top Metal



Bottom Metal



Bottom Solder Mask

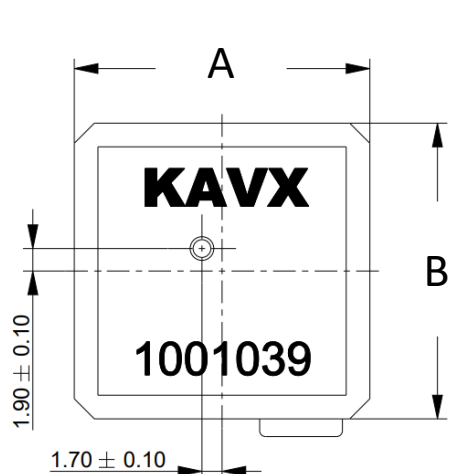


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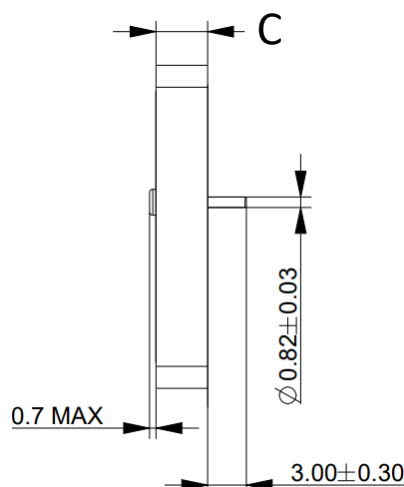
Mechanical Dimensions

Typical antenna dimensions, in mm.

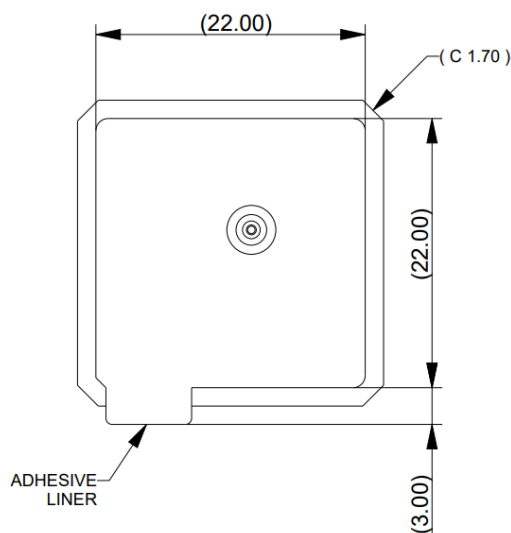
Part Number	A (mm)	B (mm)	C (mm)
1001039	25.0 ± 0.2	25.0 ± 0.2	4.0 ± 0.2



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