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DATASHEET Part No. 1001039 Product: GPS Ceramic Patch Antenna

# Part No. 1001039 GPS Ceramic Patch Antenna

1.575 GHz

Supports: Tracking, Smart Home, Agriculture, Automotive, Healthcare, Digital Signage, Wearables, Industrial Devices



# **GPS Ceramic Patch Antenna**

1.575 GHz

	Frequency	1.5/5 GHZ	
KEY BENEFITS	Center Frequency fo	1575 ± 3.0 MHz	
Reduced Costs and Time-to-Market Standard antenna eliminates design fees and cycle time associated with a custom solution;	Return Loss	< -20 dB	
	Gain 0° XZ-Plane	5.3 dBic	
	Polarization	R.H.C.P	
getting products to market faster.	Impedance	50 ohm	
Quicker Time-to-Market By optimizing antenna size,	Axial Ratio	1.8 dB	
performance and emissions, customer and regulatory	Mechanical Specifications & Ordering Part Number		
specifications are more easily met.	Ordering Part Number	1001039	

### Reliability

Products are the latest RoHS version compliant.

#### **APPLICATIONS**

- Embedded Telematics • design Tracking • POS, Healthcare • Headsets, • M2M, Tablets Industrial Gateway, devices Access Smart Grid OBD-II Point
- Handheld

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.

### **Electrical Specifications**

Typical Characteristics, on 70 x 70 mm ground plane

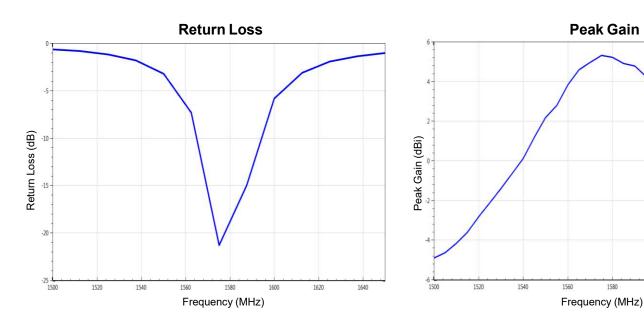
Impedance	50 ohm			
Axial Ratio	1.8 dB			
Mechanical Specifications & Ordering Part Number				
Ordering Part Number	1001039			
Size (mm)	25.0 x 25.0 x 4.5			
Mounting (mm)	Adhesive (Nitto 5000NS 22 x 22 x 0.16) & 1 through-hole Soldered Pin			
Weight (grams)	9.4			
Packaging	Plastic Tray			



1.575 GHz KYOCERA AVX Embedded Antenna Specifications. KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

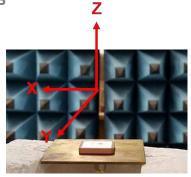
### **VSWR and Peak Gain Plots**

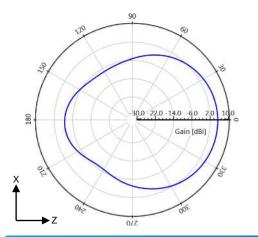
Typical performance on 70 x 70 mm PCB

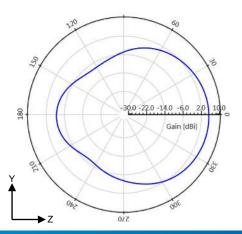


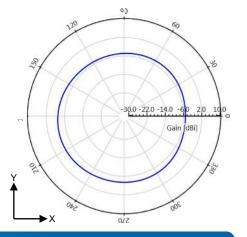
# **Antenna Radiation Patterns**

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









1580

1620

1640

tel +(1) 858.550.3820 email: <u>eth.info@KYOCERA-AVX.com</u>

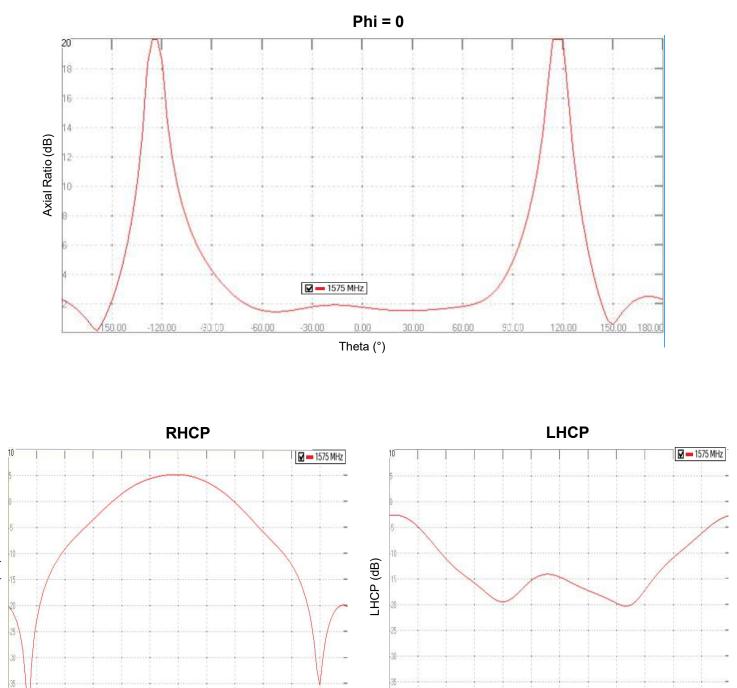
# © 2021 KYOCERA AVX



1.575 GHz KYOCERA AVX Embedded Antenna Specifications. KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

### **Axial Ratio, RHCP, LHCP Plots**

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



150.00 -120.00

120.00

150.00 180.00

00.08

-60.00

-30.00

0.00 Theta (°)

30.00

-60.00

30.00

30.00

Theta (°)

60.00

90.00

RHCP (dB)

60.00

90.00 120.00 150.00 180.0

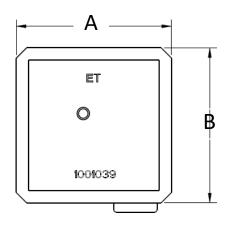


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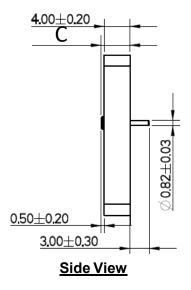
#### **Mechanical Dimensions**

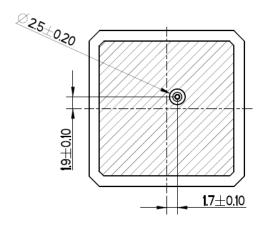
Typical antenna dimensions, in mm.

Part Number	A (mm)	B (mm)	C (mm)
1001039	$25.0 \pm 0.2$	$25.0 \pm 0.2$	$4.5 \pm 0.4$



Top View





**Bottom View** 

