

Part No. 1002789M0-AM30L0086

L1-Band/GPS Antenna

1.518 - 1.675 GHz

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



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 L1-Band/GPS enabled devices.

Real-World Performance and Implementation

KYOCERA AVX Stamped metal antennas are designed to produce optimal performance and 3D radiation patterns, offering increased coverage range without compromising on footprint dimensions.

L1-Band/GPS Antenna

1518 - 1675 MHz

KEY BENEFITS

Reduced Costs & Time-to-Market

Standard antennas eliminate design fees, redesign cycle time and minimize risk associated with customer solution. Quicker time to market.

Quicker Time-to-Market

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

Reliability

Products are the latest RoHS version compliant.

APPLICATIONS

- Embedded design
- Cellular, Headsets, Tablets
- Gateways
- Handhelds
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

Electrical Specifications

Typical performance on 457.2 x 457.2 mm metal plane

Frequency (MHz)	1518 - 1675
Peak Gain	6 dBic
VSWR Match	< 1.2:1
Polarization	RHCP
Axial Ratio	< 5 dB at Zenith
Power Handling	2W CW
Feed Point Impedance	50 Ω unbalanced

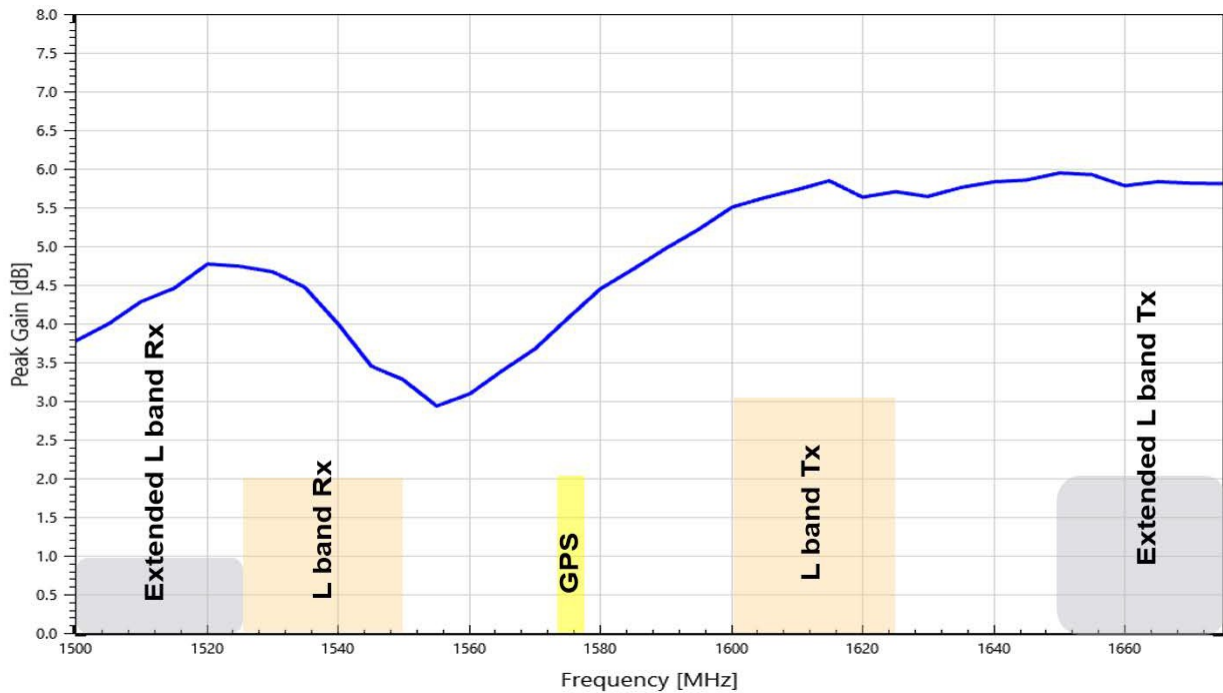
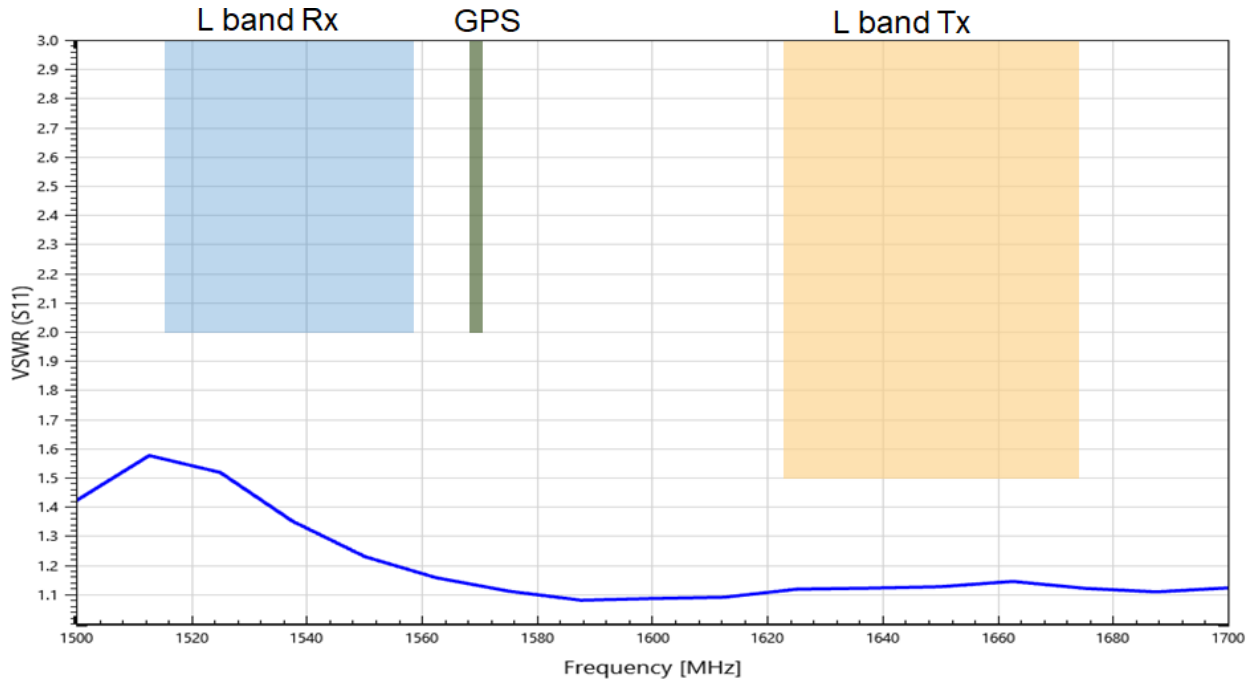
Mechanical Specifications & Ordering Part Number

Ordering Part Number	1002789M0-AM30L0086
Size (mm)	78.0 x 78.0 x 6.6
Mounting	Adhesive tape
Weight (grams)	26.47
Cables and Connectors	1.13 mm Diameter & MMCX Compatible Connector
Mounting and Cable Length	VHB 3M5925 Adhesive; 86 mm, Black

1.518 - 1.675 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

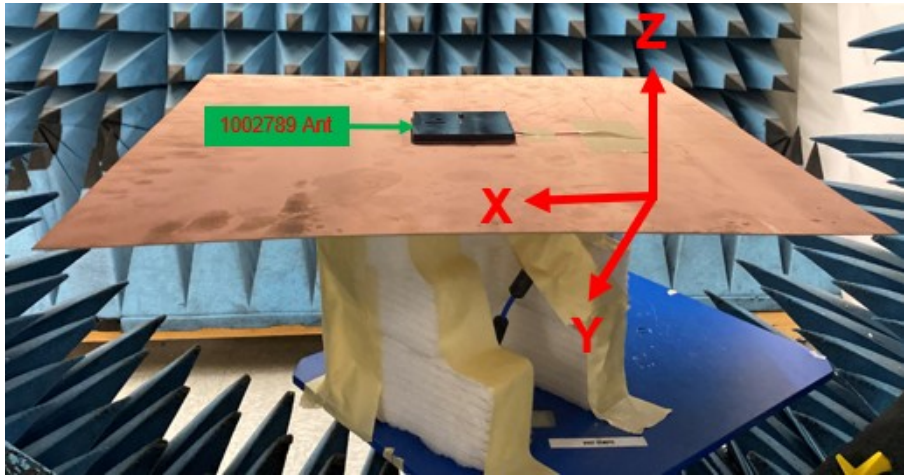
Typical performance on 457.2 x 457.2 mm metal plane



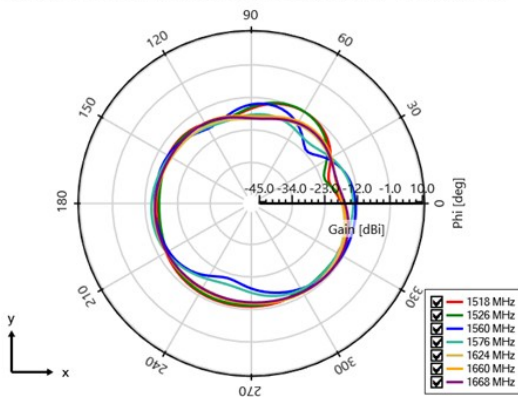
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Antenna Radiation Patterns

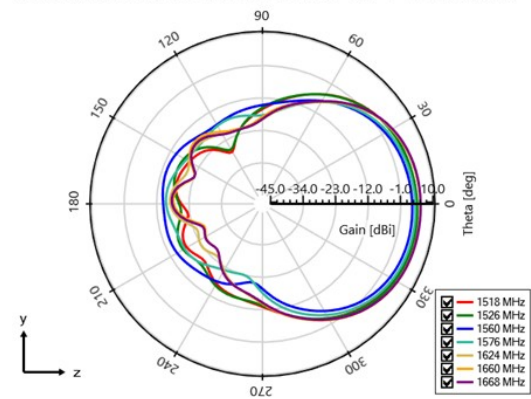
Typical performance on 457.2 x 457.2 mm metal plane
Measured @ 1518 - 1675 MHz



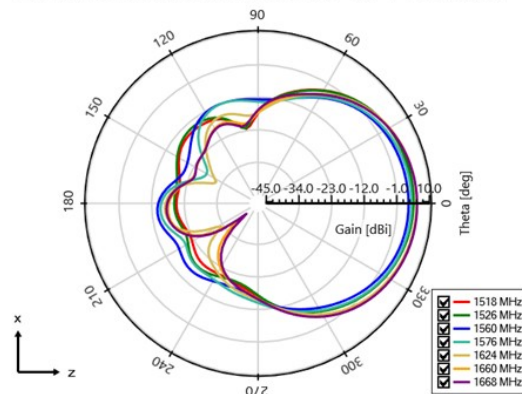
1002789_F_with 18 inches x 18 inches GROUND PLANE - Gain - $\theta = 90$ deg [Plane XY]



1002789_F_with 18 inches x 18 inches GROUND PLANE - Gain - $\phi = 90$ deg [Plane YZ]



1002789_F_with 18 inches x 18 inches GROUND PLANE - Gain - $\phi = 0$ deg [Plane XZ]

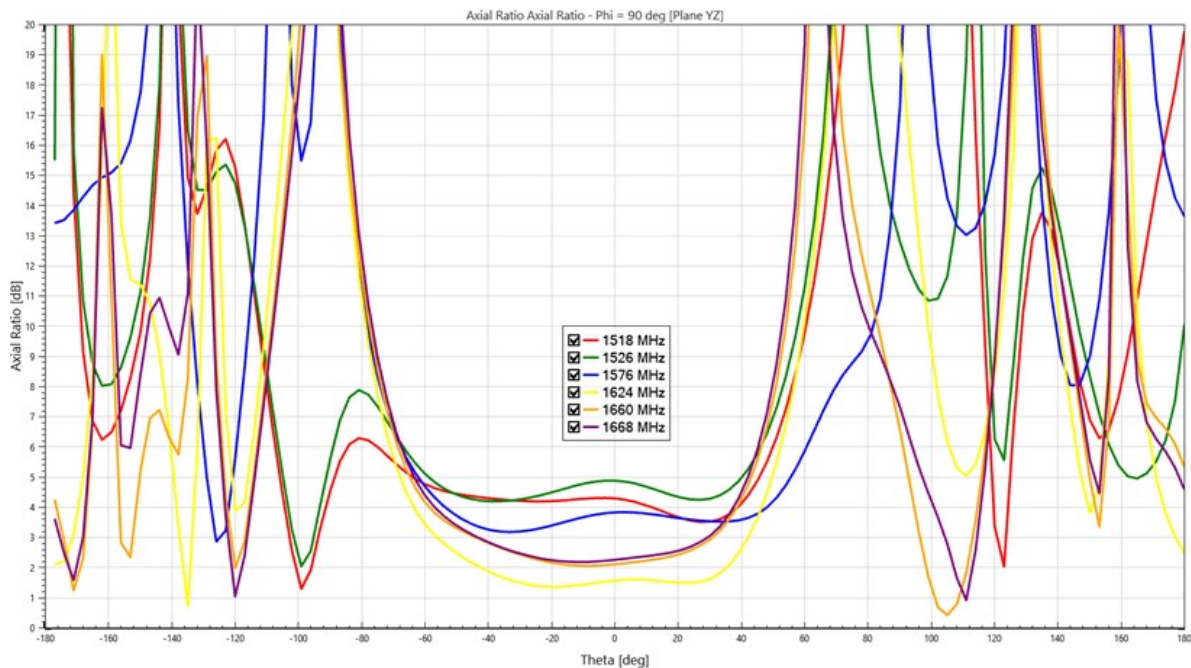
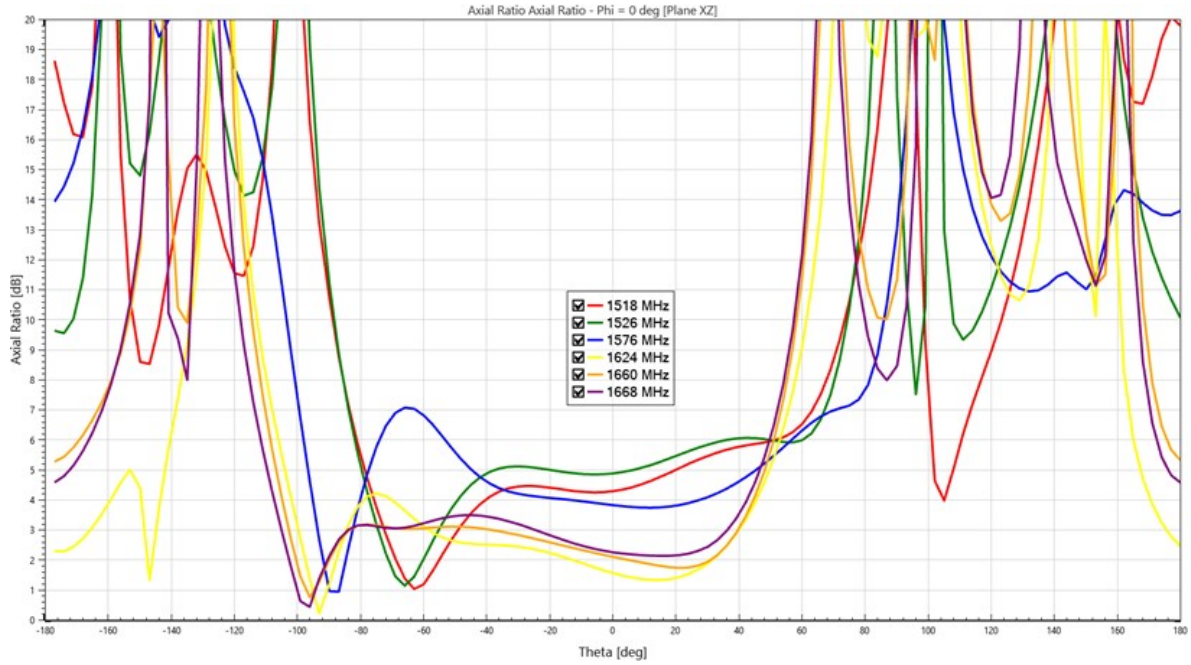


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Axial Ratio

Typical performance on 457.2 x 457.2 mm metal plane

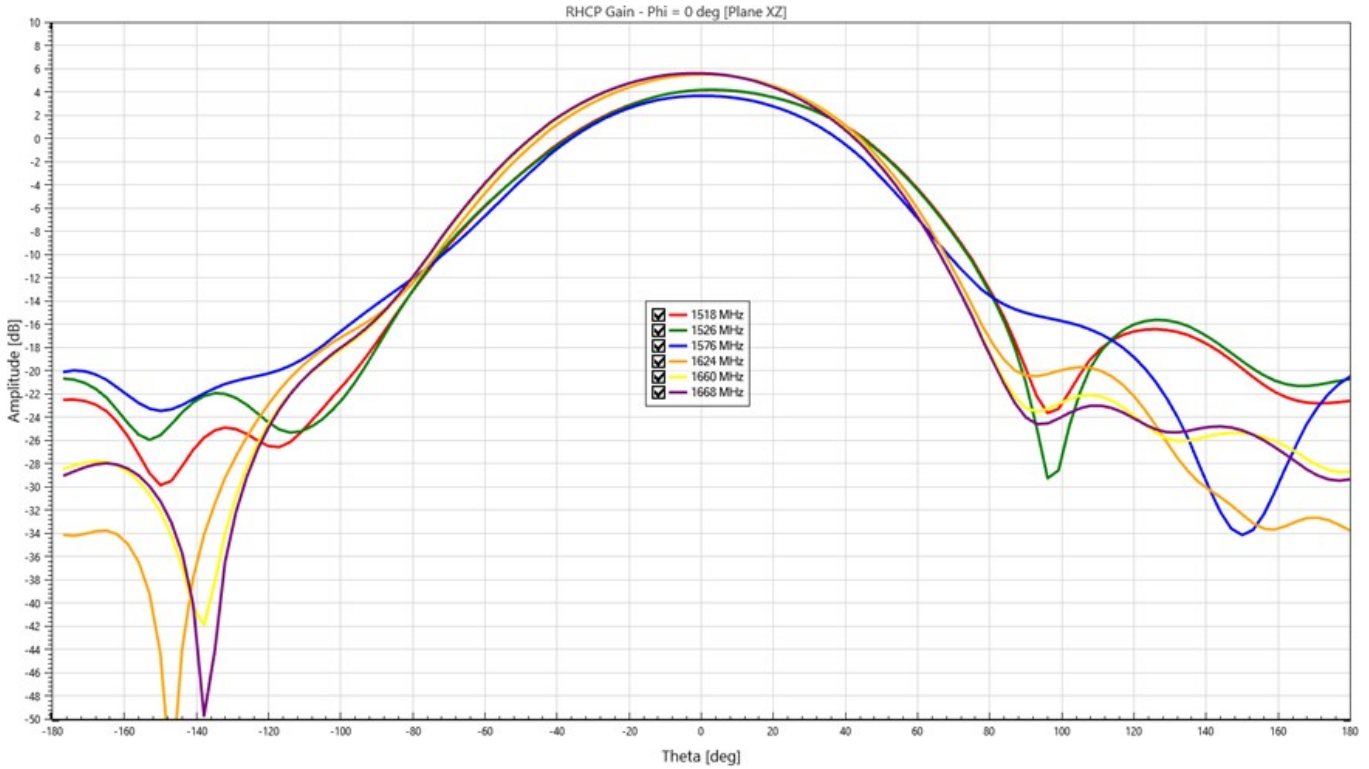
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RHCP, LHCP Plots

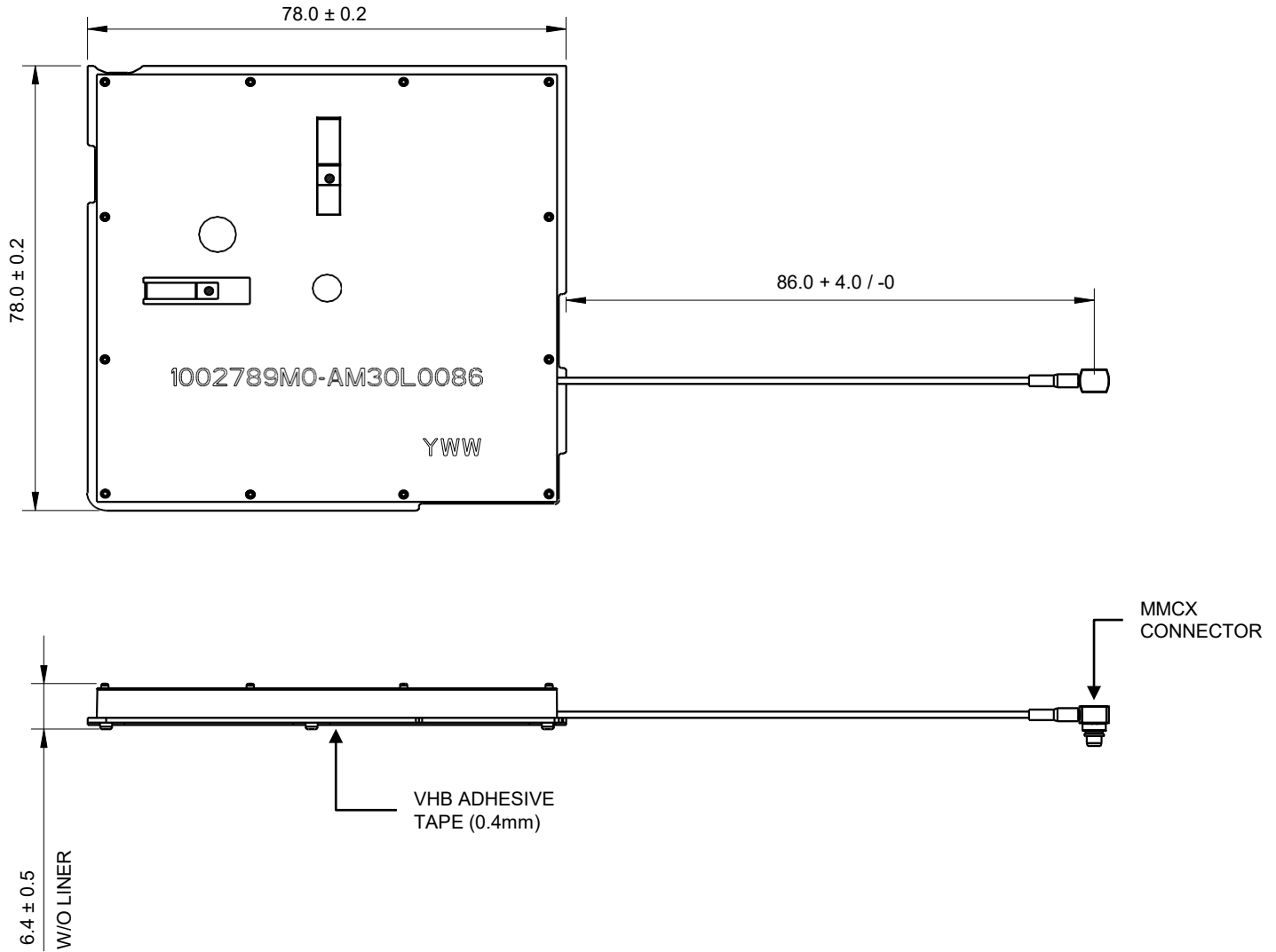
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Antenna Dimensions

Typical antenna dimensions (mm)



Typical Ordering Part Numbers

Part Number	Polarization	Connector	Cable Length (mm)	Mounting Options
1002789M0-AM30L0086	RHCP	MMCX Compatible	86	VHB 3M5925 Adhesive
1002789M0-FC10L2000	RHCP	FAKRAC	2000	VHB 3M5925 Adhesive