

Part No. 1002789M0-AM30L0086

GPS, L1, B1, E1, G1, Iridium Antenna

1518 - 1675 MHz

Supports: Tracking, Agriculture, Industrial Devices, Navigation, Satellite Communications, IoT 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, L1, B1, E1, and Iridium band 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.

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 Antenna

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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.

Environmental Compliance

Products are the latest RoHS version compliant.

APPLICATIONS

- Telematics systems
- Remote surveillance,
- Fleet Management & Asset Tracking
- Military and Security
- Iridium with GNSS
- Marine & Avionics Systems
- Law Enforcement & Public Safety

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

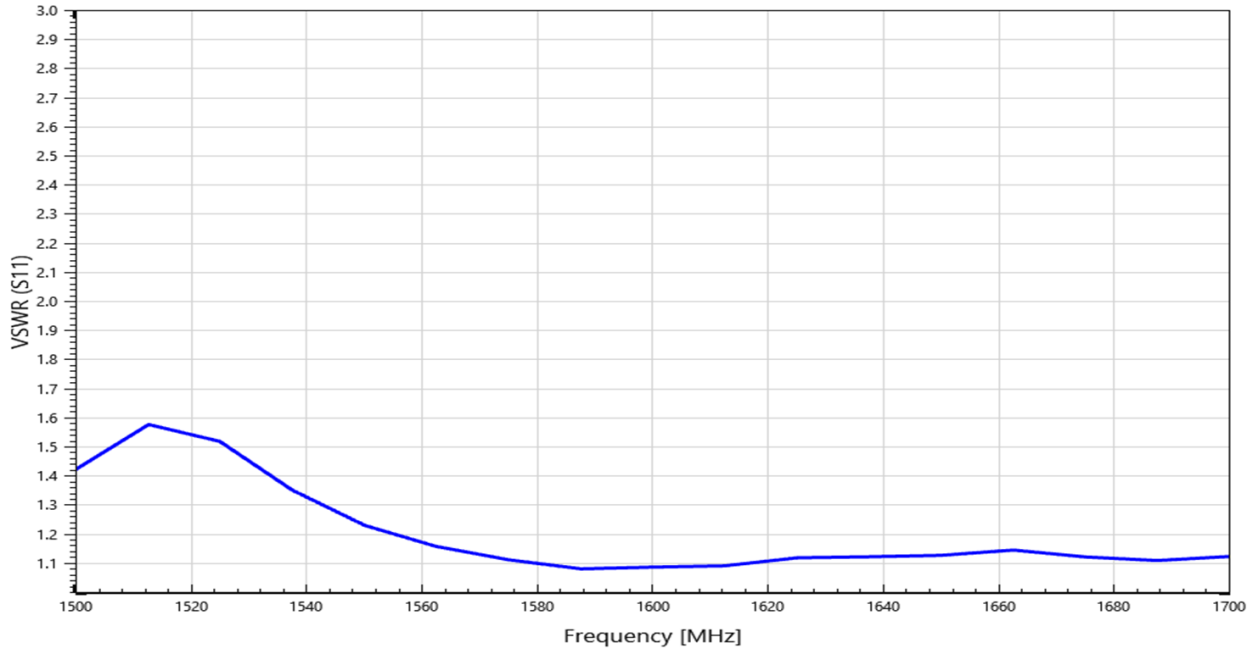
Ordering Part Number	1002789M0-AM30L0086
Size (mm)	78.0 x 78.0 x 6.6
Mounting	Adhesive tape
Weight (grams)	26.47
Cables and Connectors	1.13 mm Diameter & MMCX Compatible Connector
Mounting and Cable Length	VHB 3M5925 Adhesive; 86 mm, Black

1518 - 1675 MHz KYOCERA AVX Embedded Antenna Specifications
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

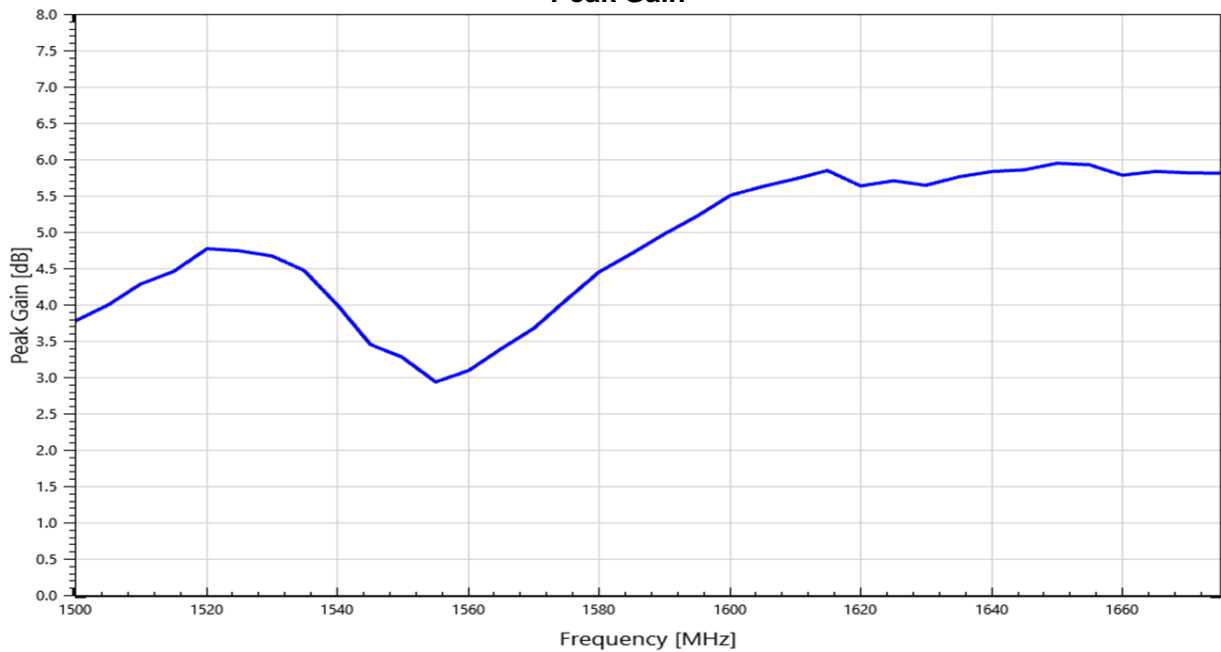
VSWR and Peak Gain Plots

Typical performance on 457.2 x 457.2 mm metal plane

VSWR



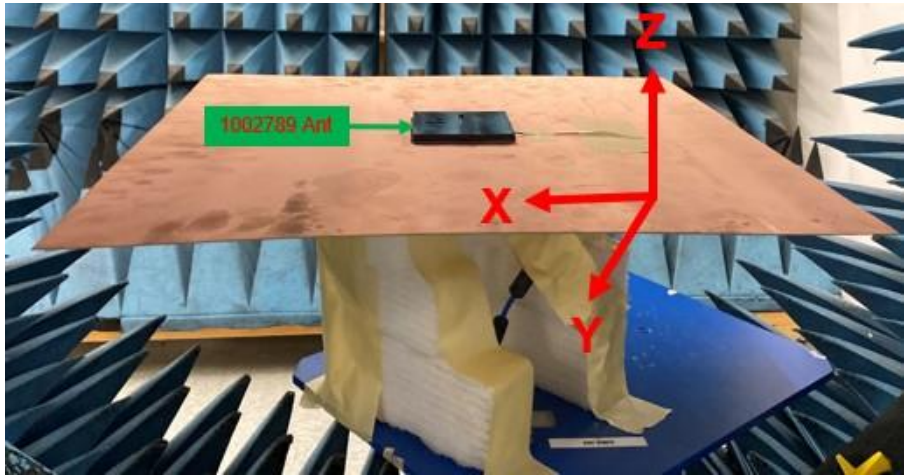
Peak Gain



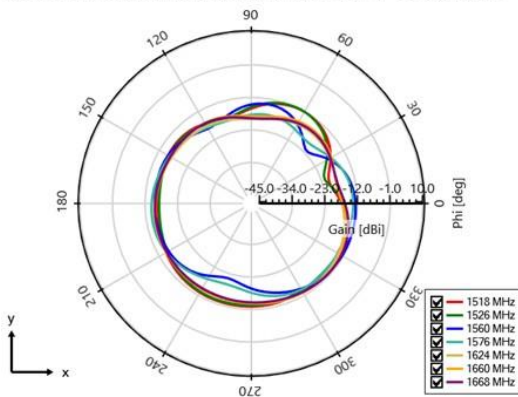
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Antenna Radiation Patterns

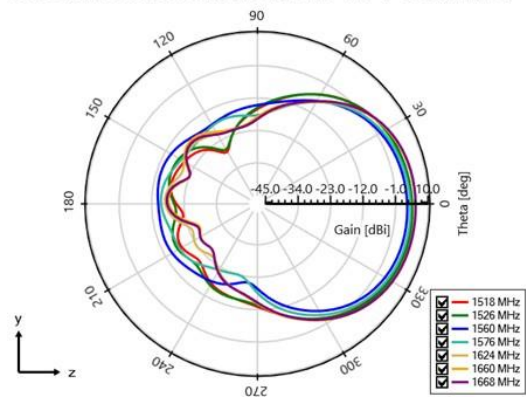
Typical performance on 457.2 x 457.2 mm metal plane
 Measured @ 1518 - 1675 MHz



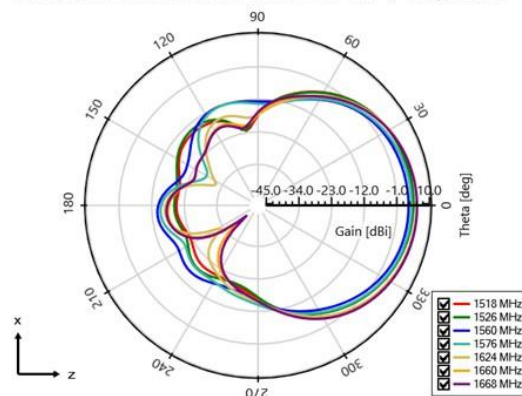
1002789_F_with 18 inches x 18 inches GROUND PLANE - Gain - $\theta = 90$ deg [Plane XY]



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



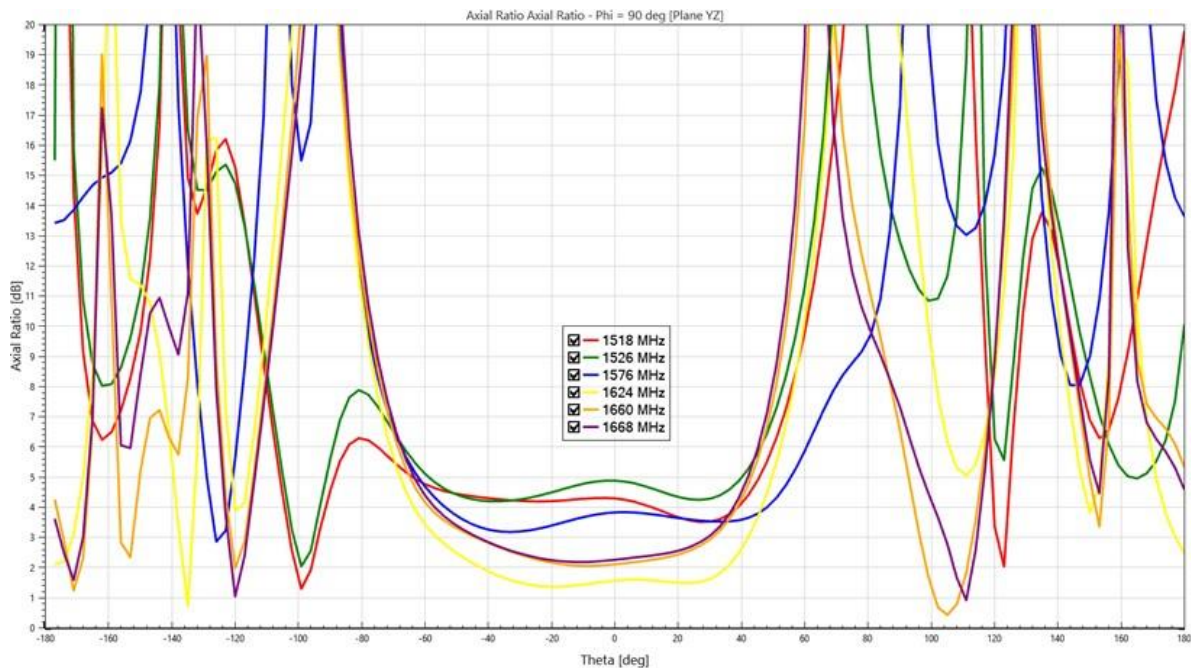
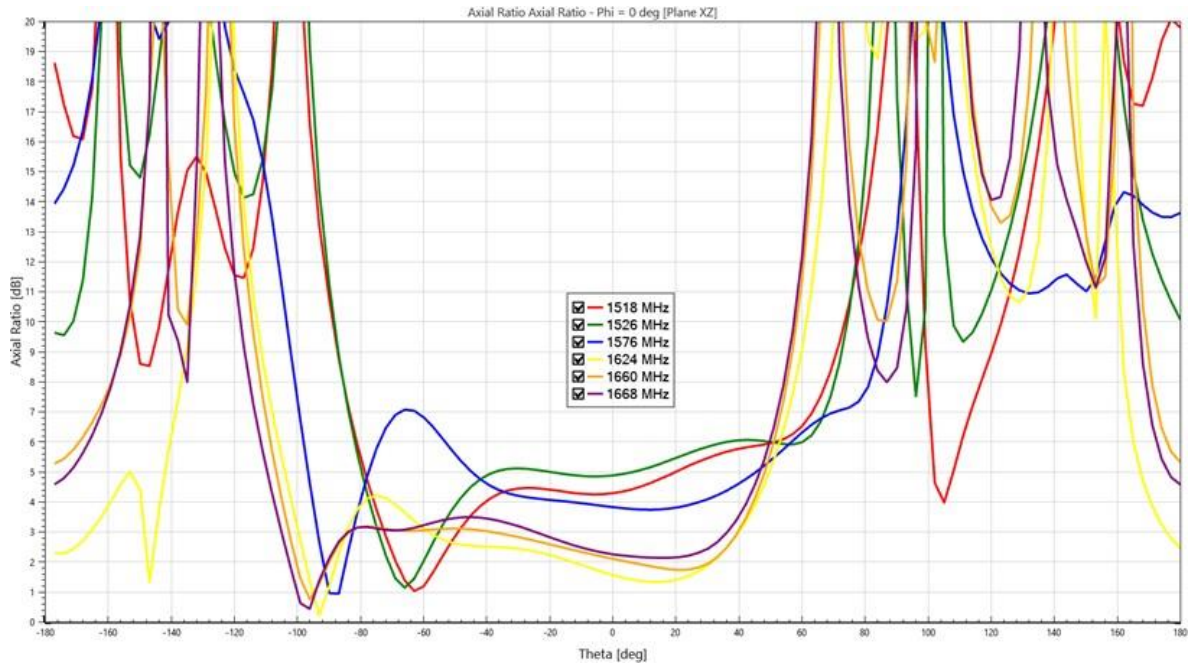
1002789_F_with 18 inches x 18 inches GROUND PLANE - Gain - $\phi = 0$ deg [Plane XZ]



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Axial Ratio

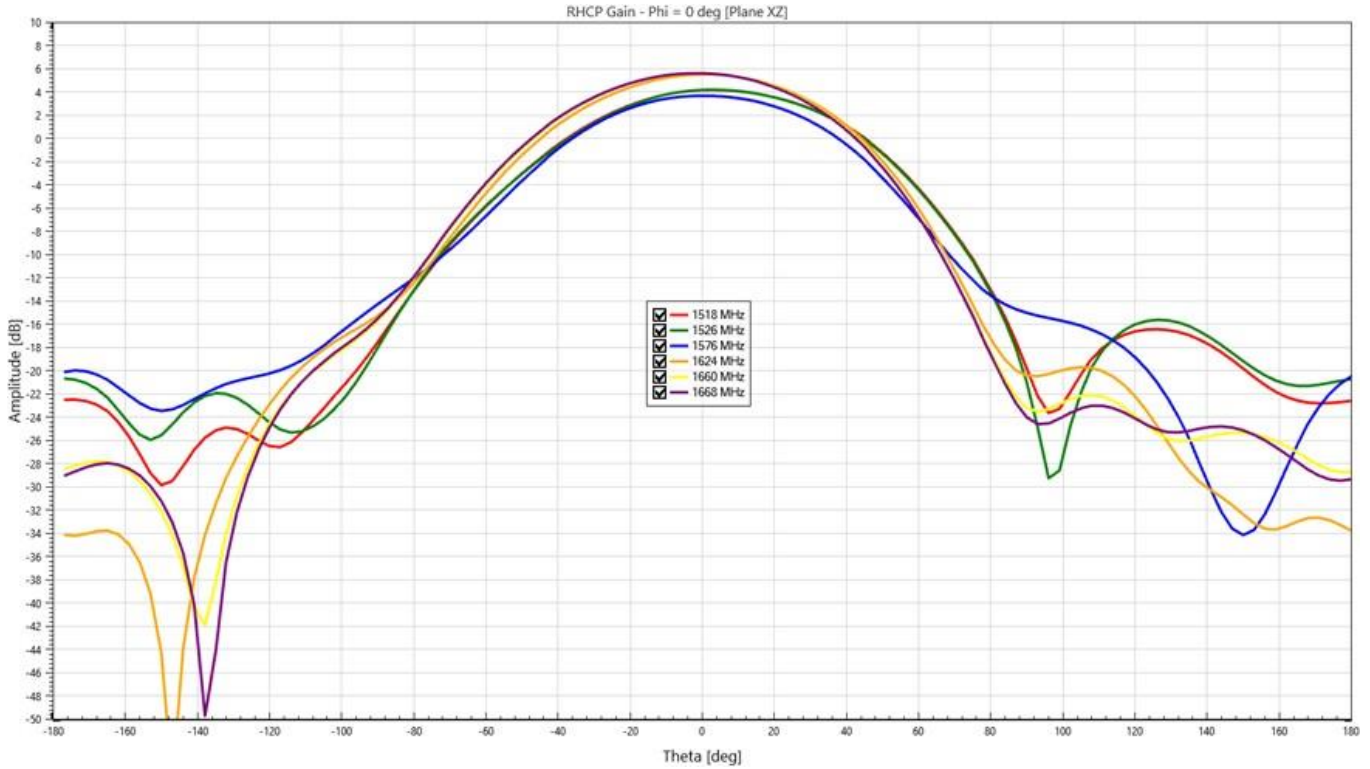
Typical performance on 457.2 x 457.2 mm metal plane
 Measured @ 1518 - 1675 MHz



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RHCP, LHCP Plots

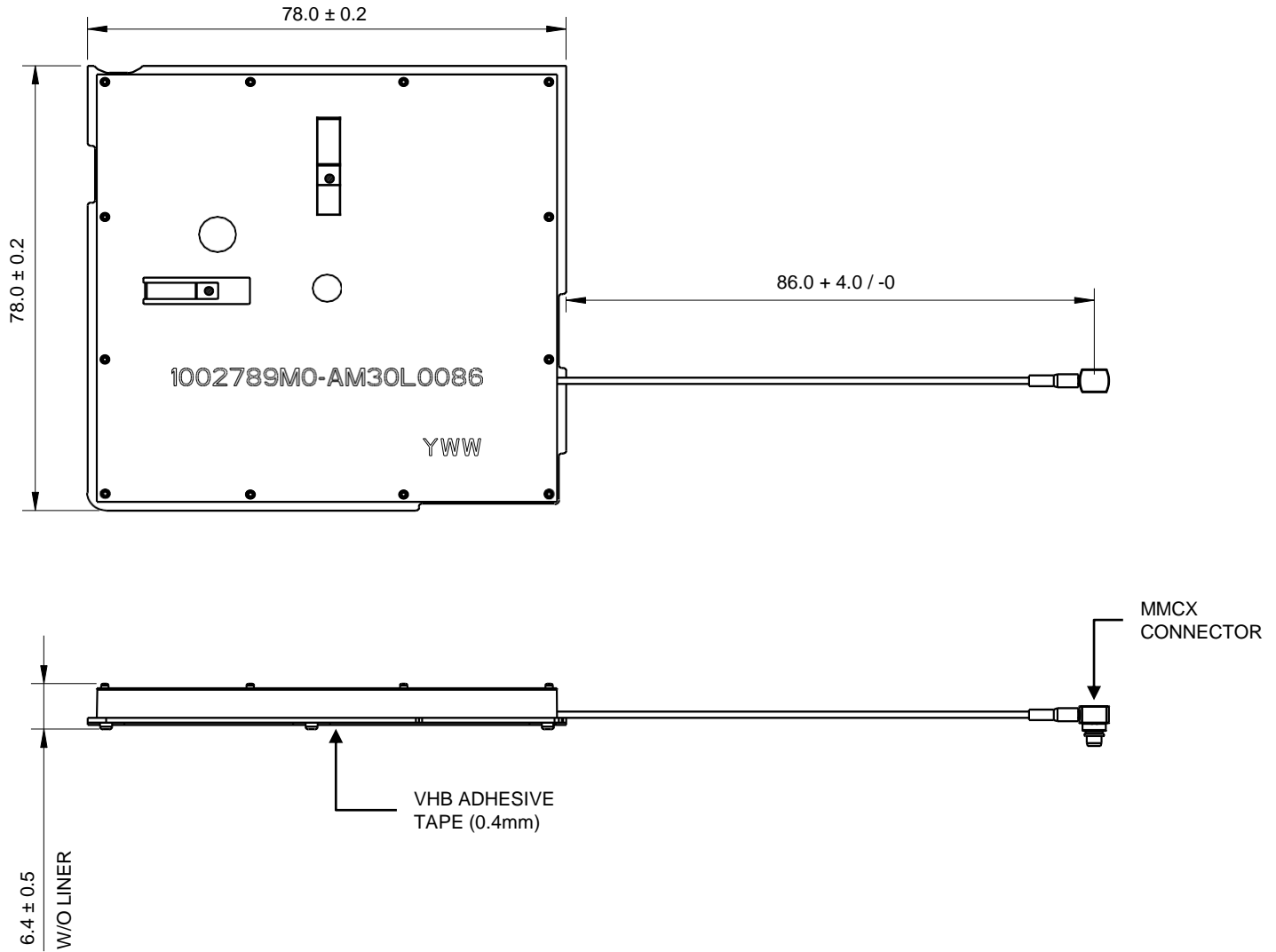
Typical performance on 457.2 x 457.2 mm metal plane
Measured @ 1518 - 1675 MHz



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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