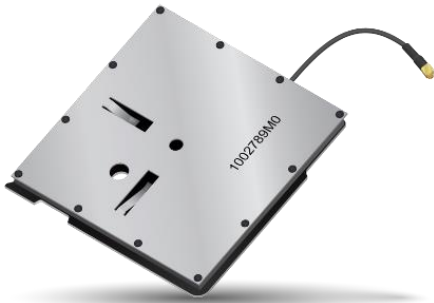


# Part No. 1002789M0-AM30L0086

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

1518 - 1675 MHz

Supports: Satellite Communications, 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, 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.

GPS, L1, B1, E1, G1, Iridium  
 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.

##### 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 $\Omega$ unbalanced

### Mechanical Specifications & Ordering Part Number

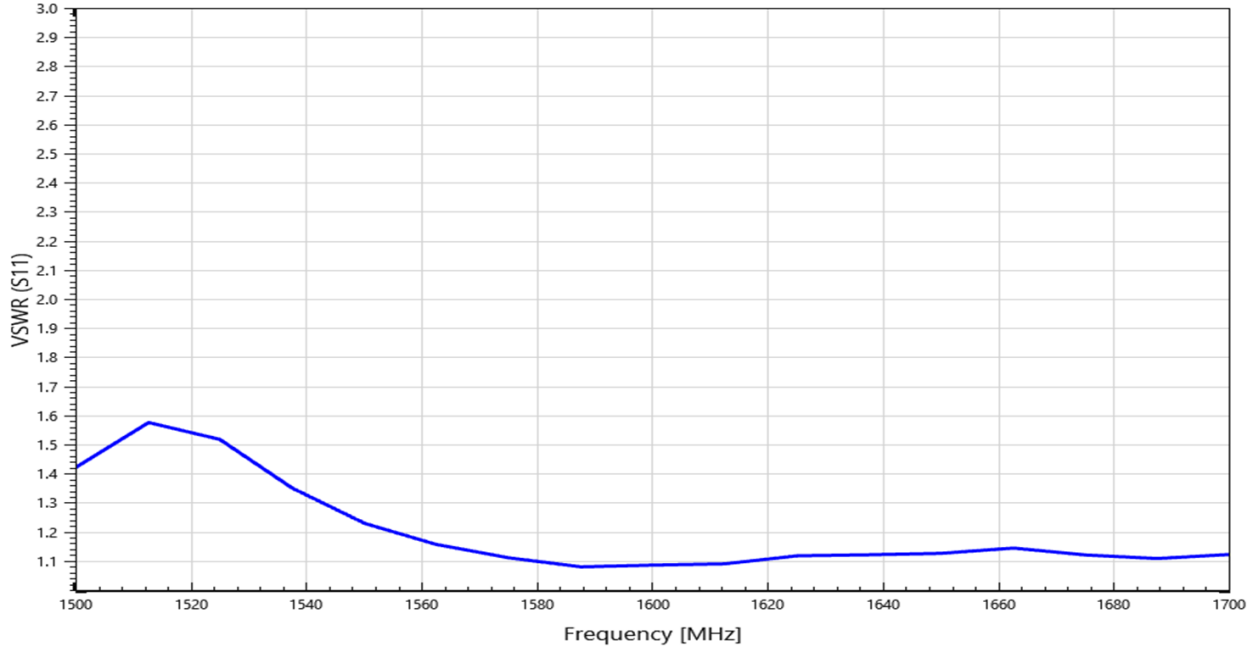
Ordering Part Number	1002789M0-AM30L0086
Size (mm)	78.0 x 78.0 x 6.6
Mounting	Adhesive tape
Weight (grams)	26.47
Cables and Connectors	1.13 mm Diameter & MMCX Compatible Connector
Mounting and Cable Length	VHB 3M5925 Adhesive; 86 mm, Black
Additional Resources	<a href="#">Download 3D FIT File</a>

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

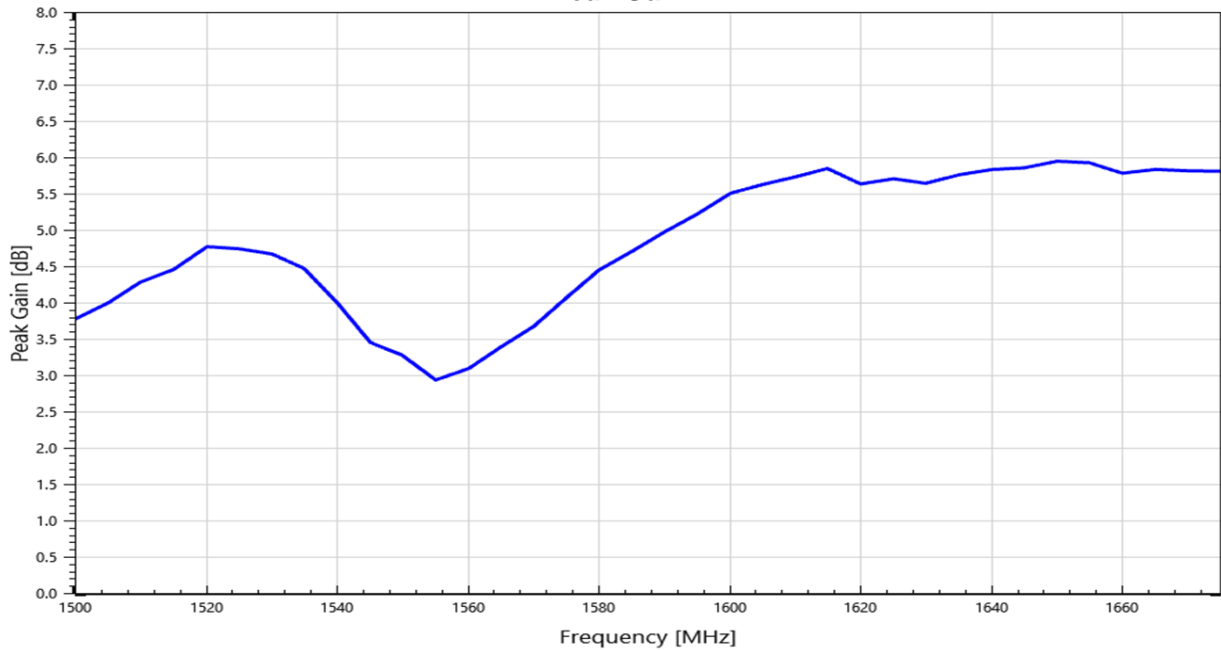
VSWR and Peak Gain Plots

Typical performance on 457.2 x 457.2 mm metal plane

VSWR



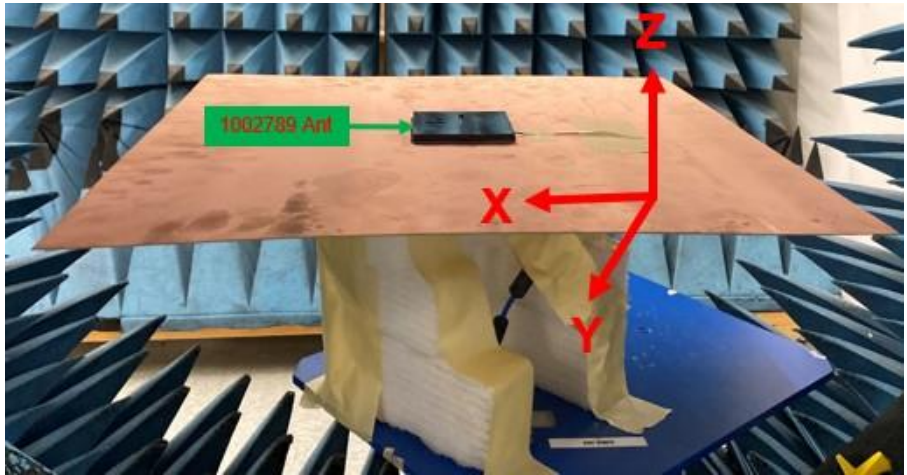
Peak Gain



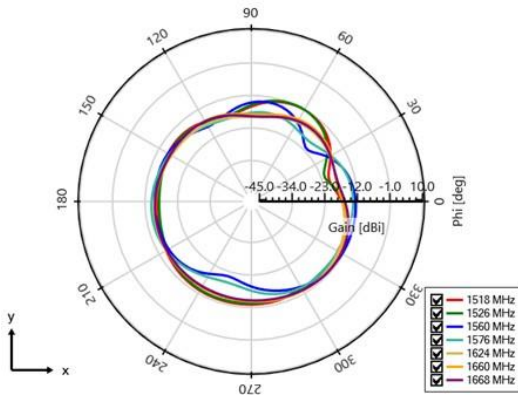
**1518 - 1675 MHz KYOCERA AVX Embedded Antenna Specifications**  
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**Antenna Radiation Patterns**

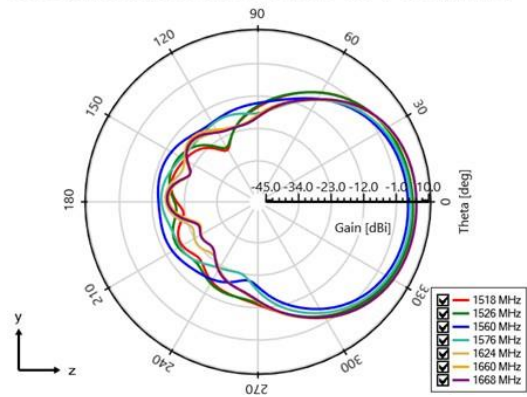
Typical performance on 457.2 x 457.2 mm metal plane  
 Measured @ 1518 - 1675 MHz



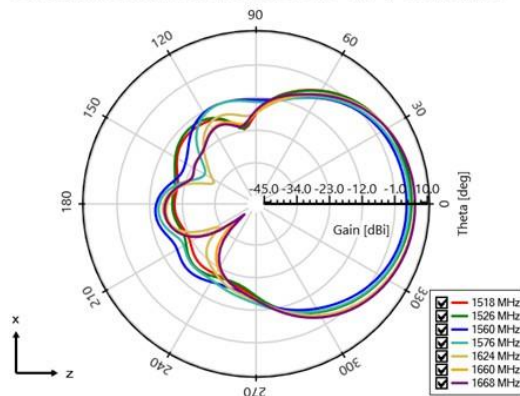
1002789\_F\_with 18 inches x 18 inches GROUND PLANE - Gain -  $\theta = 90$  deg [Plane XY]



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



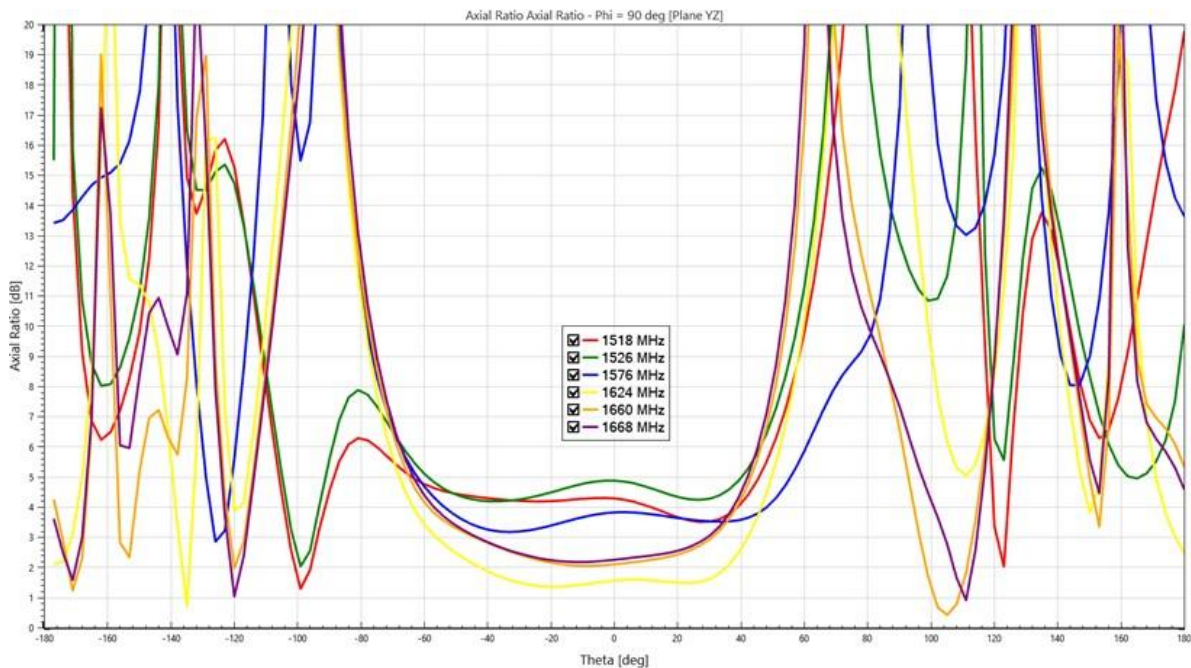
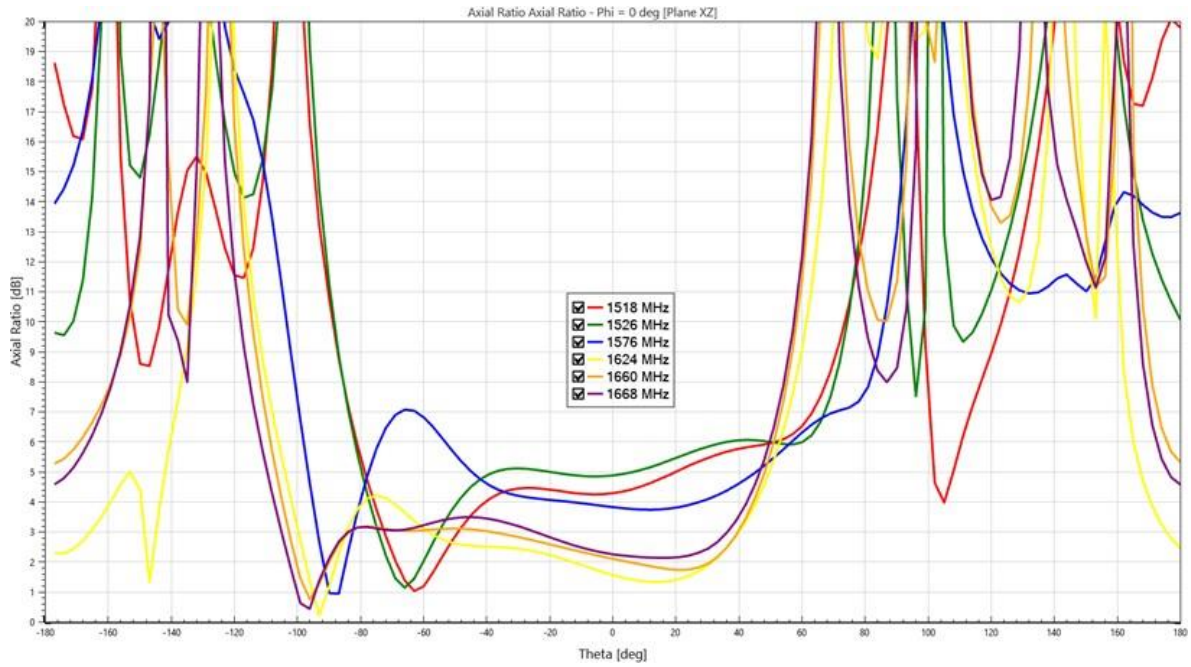
1002789\_F\_with 18 inches x 18 inches GROUND PLANE - Gain -  $\phi = 0$  deg [Plane XZ]



**1518 - 1675 MHz KYOCERA AVX Embedded Antenna Specifications**  
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**Axial Ratio**

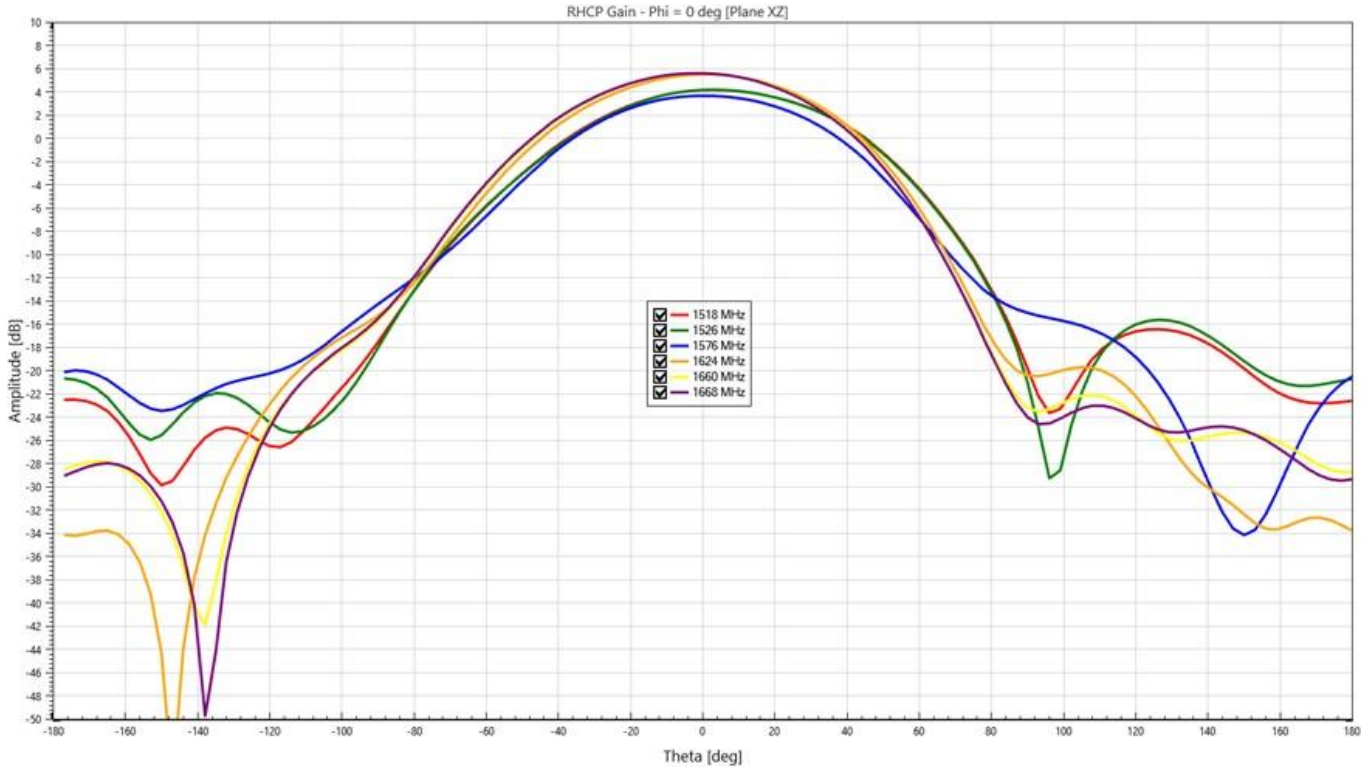
Typical performance on 457.2 x 457.2 mm metal plane  
 Measured @ 1518 - 1675 MHz



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

**RHCP, LHCP Plots**

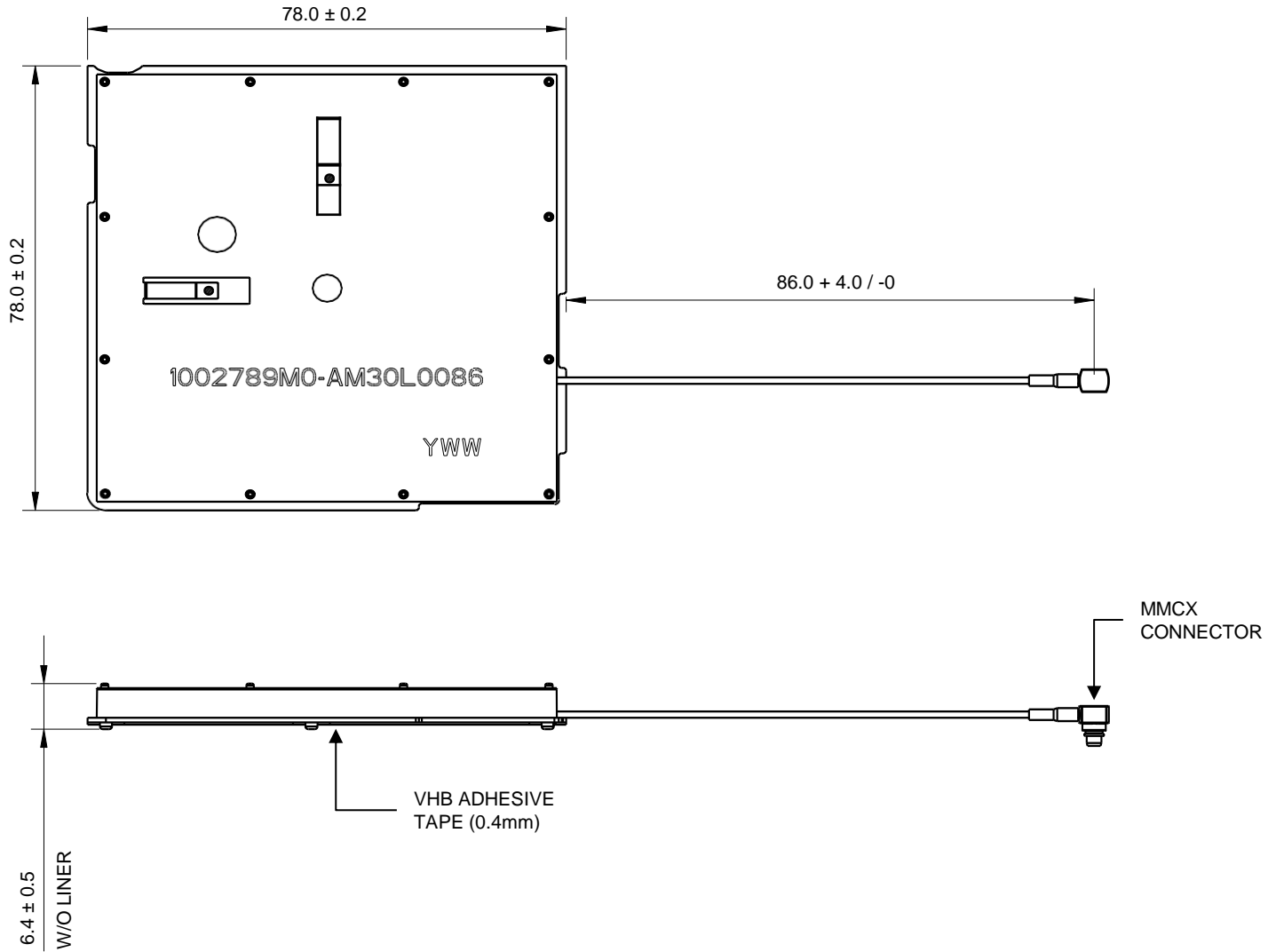
Typical performance on 457.2 x 457.2 mm metal plane  
 Measured @ 1518 - 1675 MHz



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

**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

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

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### Additional Resources – 1002789M0-AM30L0086

**3D FIT File:**

[https://www.kyocera-avx.com/download/antennas/ME-FIT/1002789M0\\_ME\\_fit.zip](https://www.kyocera-avx.com/download/antennas/ME-FIT/1002789M0_ME_fit.zip)