

# Part No. 1005190F0

## UWB FPC Embedded Antenna

6.5 – 8.5 GHz

Supports: Smart Home, Agriculture, Tracking, Radar, Automotive, Healthcare, Digital Signage, Telematics



KYOCERA AVX's 1005190F0 is a versatile off-board UWB FPC antenna optimized for applications spanning 6.5 – 8.5 GHz where off-board implementation is advantageous and necessary. 1005190F0 is ideal for systems requiring a ground plane independent antenna allowing maximum placement flexibility.

Custom cable and connector options are available. Please contact us for more information.

### Electrical Specifications

Typical Performance using 100 mm cable tested on PC-ABS

Frequency	6.5 – 8.5 GHz
Peak Gain	5.3 dBi
Average Efficiency	85%
VSWR Match	2.0 :1 max
Feed Point Impedance	50 ohms unbalanced
Polarization	Linear
Operation Temperature	-40 to +85 °C
Power Handling	10 Watt

### UWB FPC Embedded Antenna

6500 – 8500 MHz

#### KEY BENEFITS

##### Stay-in-Tune

KYOCERA AVX's antenna technology provides superior RF field containment, resulting in less interaction with surrounding components.

##### 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
- Radar
- Gateway, Access Point
- Handheld
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

### Mechanical Specifications & Ordering Part Number

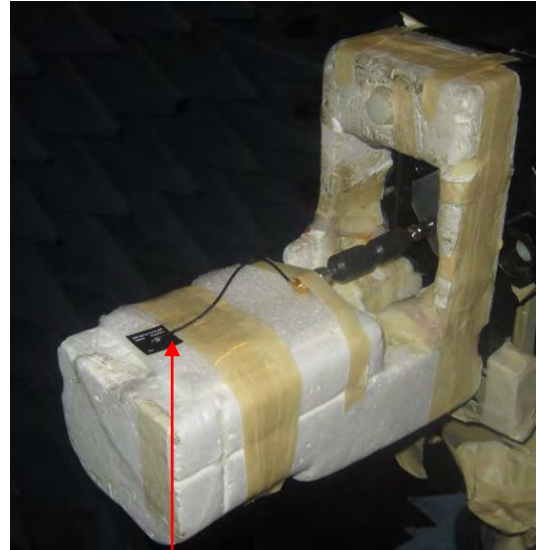
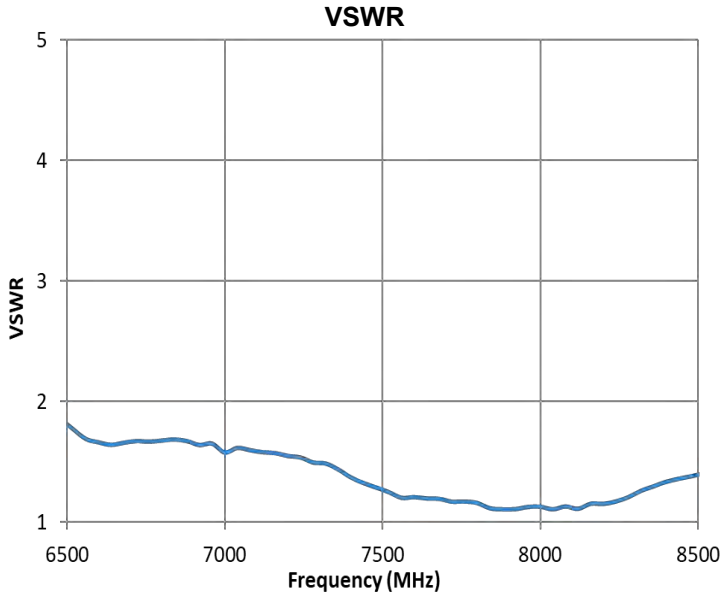
Ordering Part #	1005190F0
Dimensions (mm)	18.6 x 15.6 x 0.2
Weight (grams)	0.77
Cable/ Connector (mm)	Length: 100, Diameter: 1.37, Color: Black; MHF compatible connector
Mounting	Adhesive on bottom side of antenna
Storage Temperature (°C)	-40 to +85
Packaging	PE bags

\*Additional variations available with different cable lengths, colors and connectors.

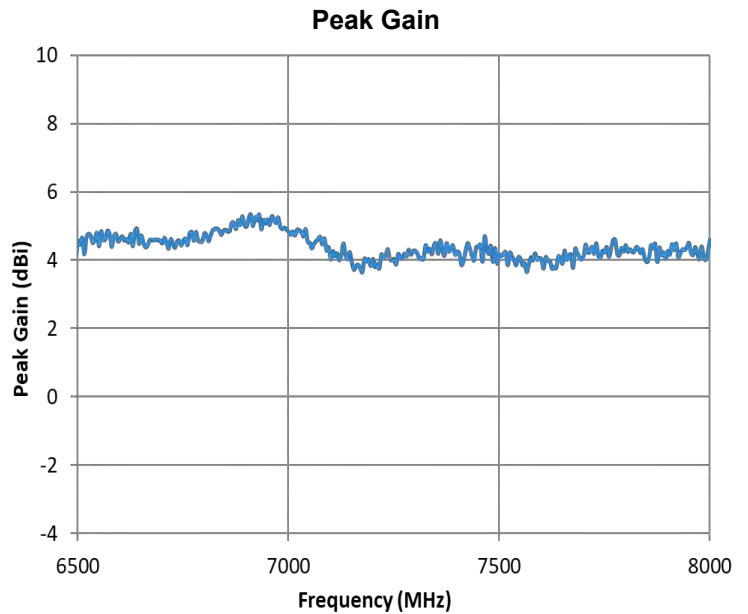
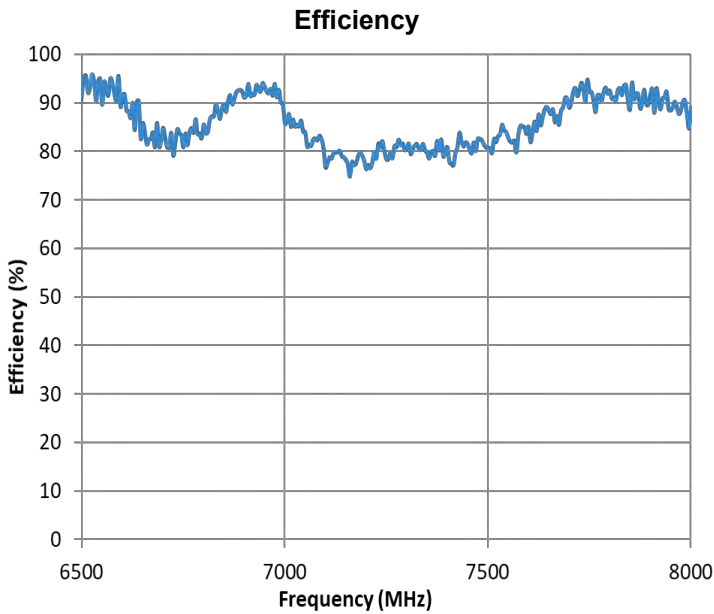
**UWB FPC Embedded Antenna Specifications**  
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

**Typical VSWR, Efficiency and Peak Gain plots**

Typical Performance using 100 mm cable tested on PC-ABS



**1005190F0**

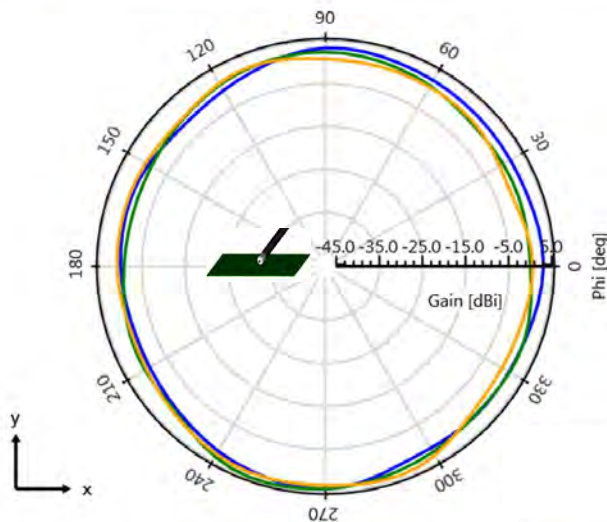
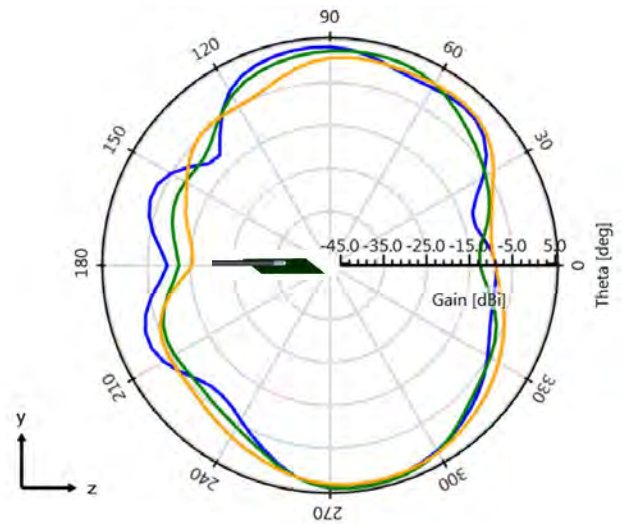
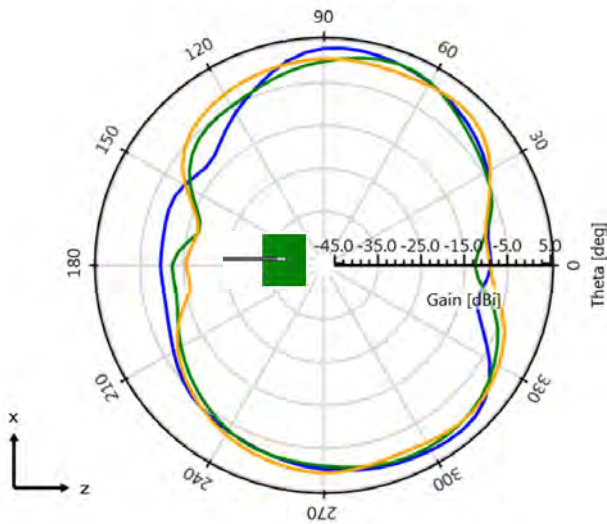
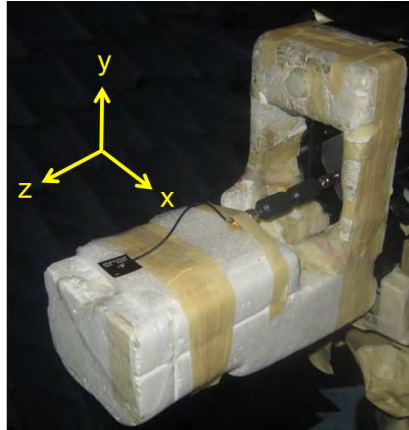


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**Radiation Patterns Plots**

Typical Performance using 100 mm cable tested on PC-ABS

Typical Performance @ 6500 MHz, 7000 MHz, 8000 MHz



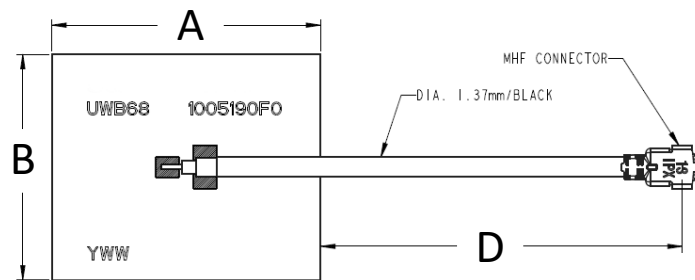
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**Mechanical Dimensions (MHF Connector)**

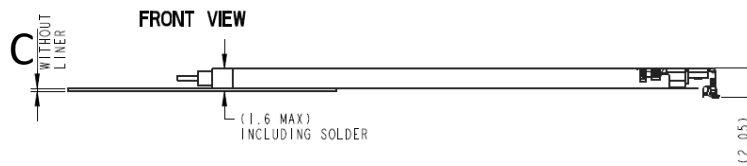
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Connector Type
1005190F0-AA70L0025	18.6	15.6	0.2	25 ± 3.0	MHF
1005190F0-AA70L0050	18.6	15.6	0.2	50 ± 3.0	MHF
1005190F0-AA70L0075	18.6	15.6	0.2	75 ± 3.0	MHF
1005190F0-AA70L0100	18.6	15.6	0.2	100 ± 3.0	MHF
1005190F0-AA70L0150	18.6	15.6 <td 0.2	150 ± 4.0	MHF	
1005190F0-AA70L0200	18.6	15.6	0.2	200 ± 4.0	MHF

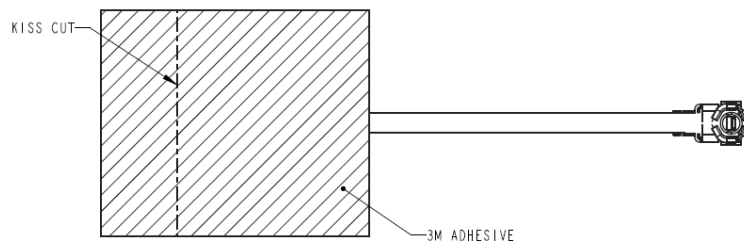
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**Top View**



**Side View**



**Bottom View**