

Part No. 1005190F0

UWB FPC Embedded Antenna

6.0 – 8.5 GHz



KYOCERA AVX's 1005190F0 is a versatile off-board UWB FPC antenna optimized for applications spanning 6.0 – 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.

UWB FPC Embedded Antenna

6000 – 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.

Environmental Compliance

Products are the latest RoHS version compliant

APPLICATIONS

- Gateway,
- Handheld
- Telematics
- Tracking
- Healthcare (FDA Class I)
- Security
- Smart city
- Smart mobility
- Fitness
- Smart Retail
- M2M, Industrial devices
- Smart Home

Electrical Specifications

Typical Performance using 100 mm cable tested on PC-ABS

Frequency	6.0 – 8.5 GHz
Peak Gain	5.3 dBi
Average Efficiency	85%
VSWR Match	3.1 :1 max
Feed Point Impedance	50 ohms unbalanced
Polarization	Linear
Operation Temperature	-40 to +85 °C
Power Handling	10 Watt

Mechanical Specifications & Ordering Part Number

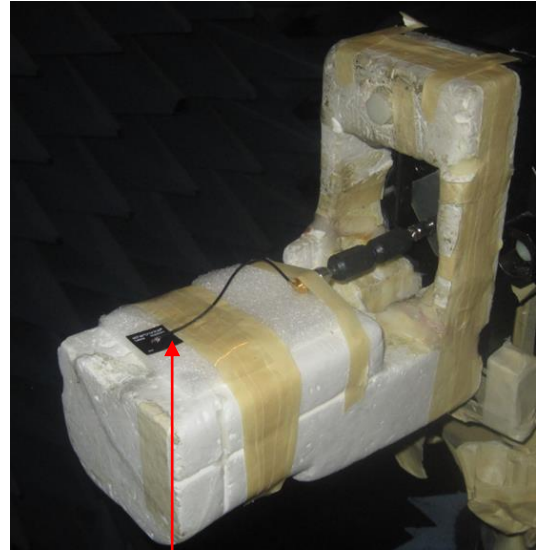
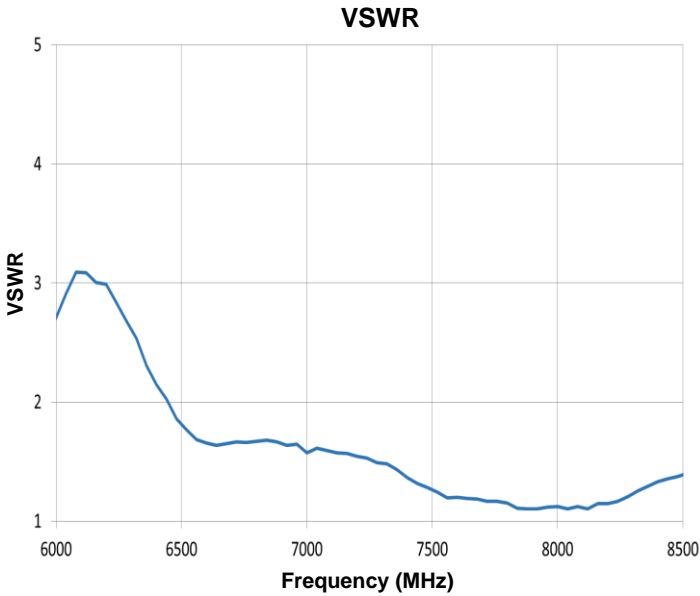
Ordering Part #	1005190F0
Dimensions (mm)	18.6 x 15.6 x 0.2
Weight (grams)	0.73
Cable/ Connector (mm)	Length: 100, Diameter: 1.37, Color: Black; MHF compatible connector
Mounting	Adhesive on bottom side of antenna
Storage Temperature (°C)	-40 to +85
Packaging	PE bags

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

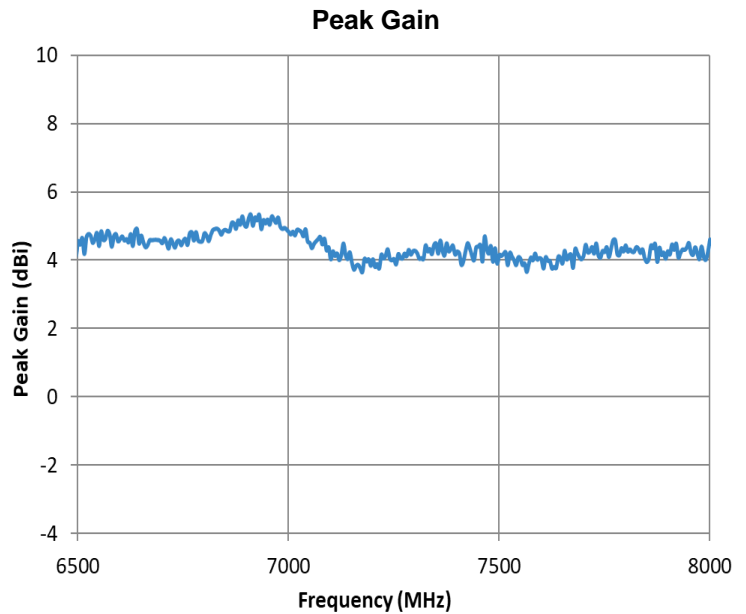
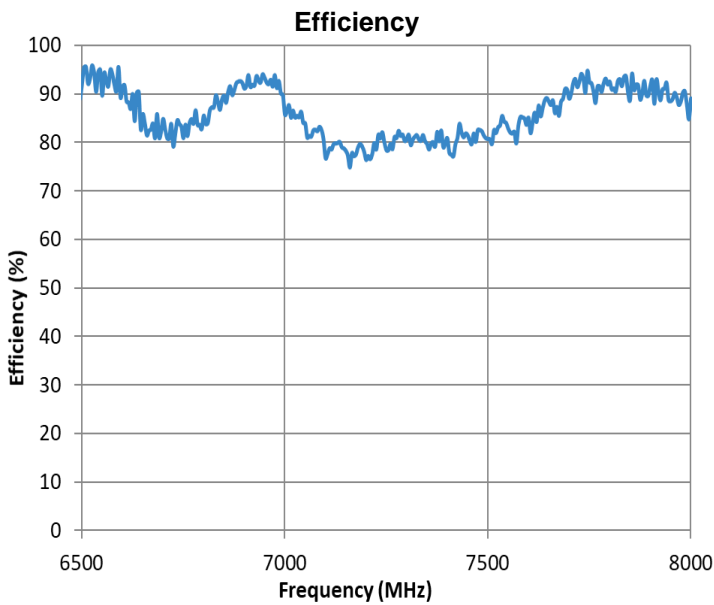
UWB FPC KYOCERA AVX Embedded Antenna Specifications
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Typical VSWR, Efficiency and Peak Gain plots

Typical Performance using 100 mm cable tested on PC-ABS



1005190F0

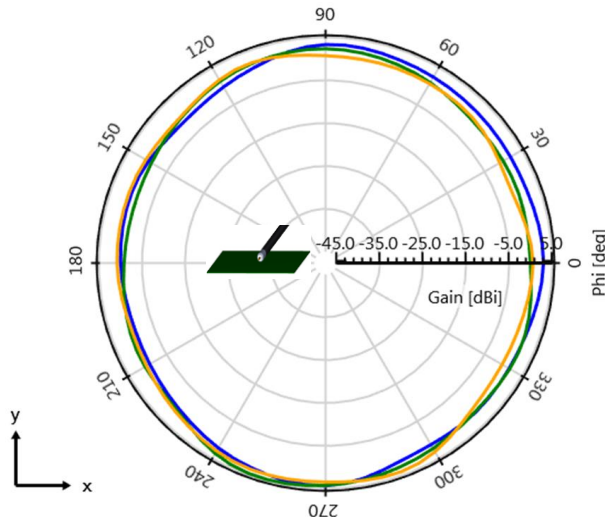
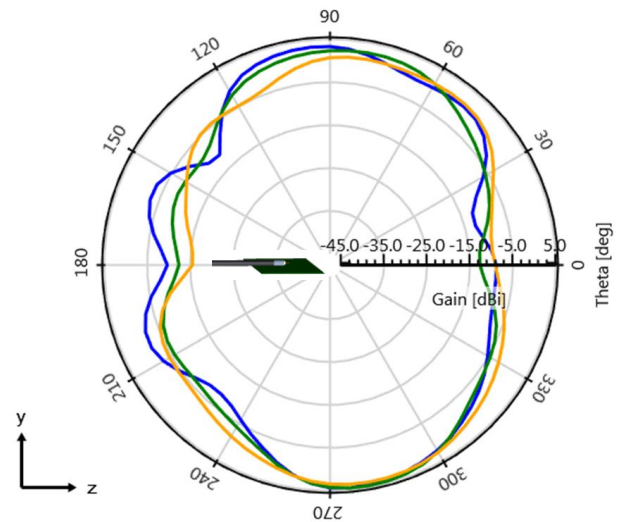
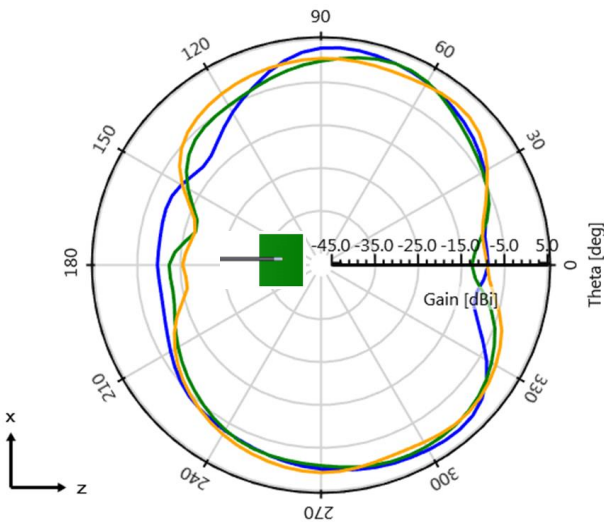
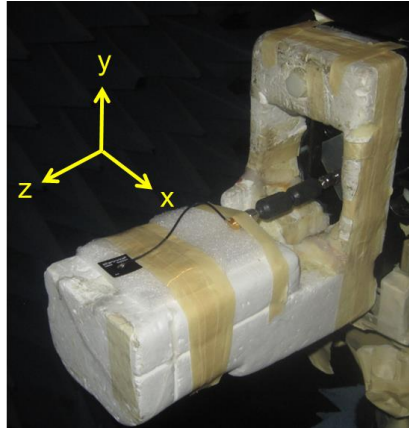


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Radiation Patterns Plots

Typical Performance using 100 mm cable tested on PC-ABS

Typical Performance @ 6500 MHz, 7000 MHz, 8000 MHz



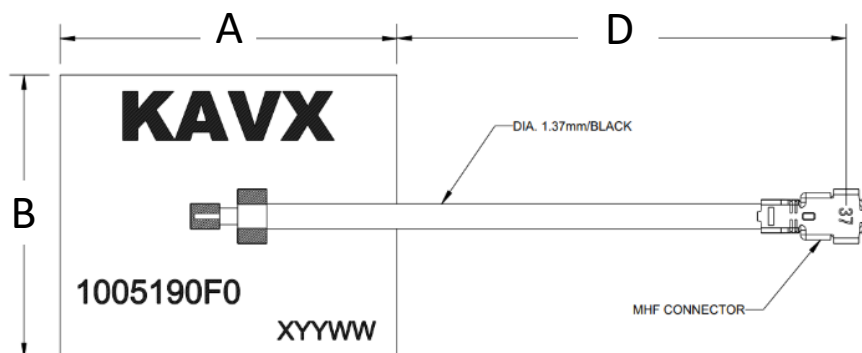
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Mechanical Dimensions (MHF Connector)

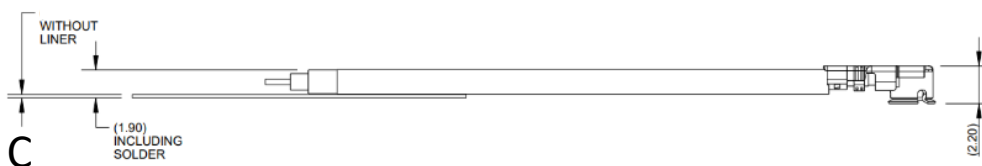
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	Cable Tolerance	Connector Type
1005190F0-AA70L0100	18.6	15.6	0.2	100	± 3.0	MHF
1005190F0-AA70LXXXX	18.6	15.6	0.2	25 ≤ XXXX < 142	± 3.0	MHF
1005190F0-AA70LXXXX	18.6	15.6	0.2	142 ≤ XXXX < 292	± 4.0	MHF
1005190F0-AA70LXXXX	18.6	15.6	0.2	292 ≤ XXXX ≤ 500	± 5.0	MHF

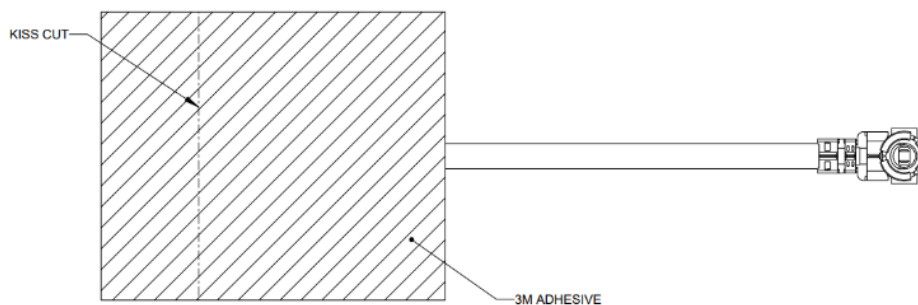
*Additional variations available with different cable lengths, colors and connectors.



Top View



Side View



Bottom View

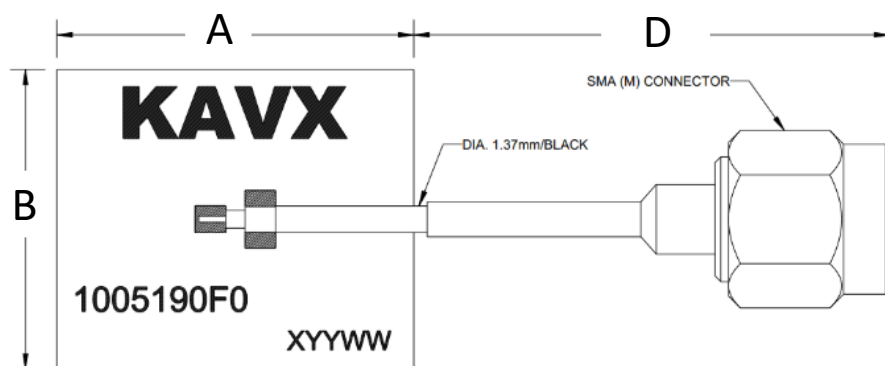
UWB FPC KYOCERA AVX Embedded Antenna Specifications
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Mechanical Dimensions (SMA Male Connector)

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Cable Tolerance	Connector Type
1005190F0-AS70L0100	18.6	15.6	0.2	100	± 3.0	SMA Male
1005190F0-AS70LXXXX	18.6	15.6	0.2	25 ≤ XXXX < 142	± 3.0	SMA Male
1005190F0-AS70LXXXX	18.6	15.6	0.2	142 ≤ XXXX < 292	± 4.0	SMA Male
1005190F0-AS70LXXXX	18.6	15.6	0.2	292 ≤ XXXX ≤ 500	± 5.0	SMA Male

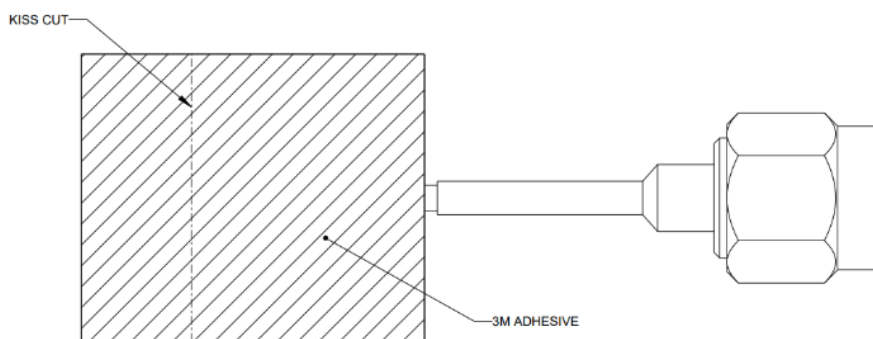
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Top View



Side View



Bottom View