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

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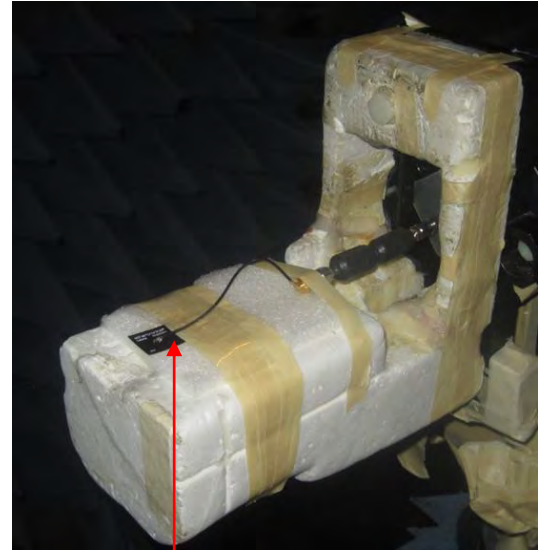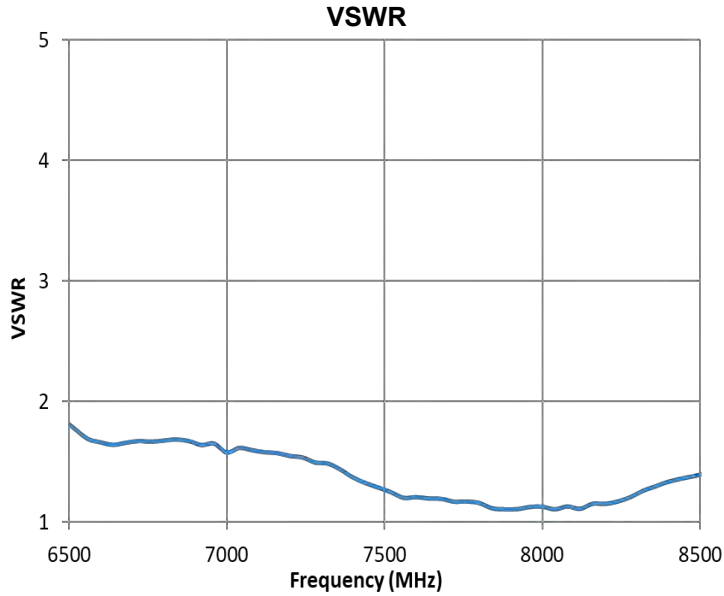
Ordering Part #	1005190F0
Dimensions (mm)	18.6 x 15.6 x 0.2
Weight (grams)	0.77
Cable/Connector (mm)	Length: 100, Diameter: 1.37, Color: Black; MHF compatible connector
Mounting	Adhesive on bottom side of antenna
Storage Temperature (°C)	-40 to +85
Packaging	PE bags

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

UWB FPC Embedded Antenna

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
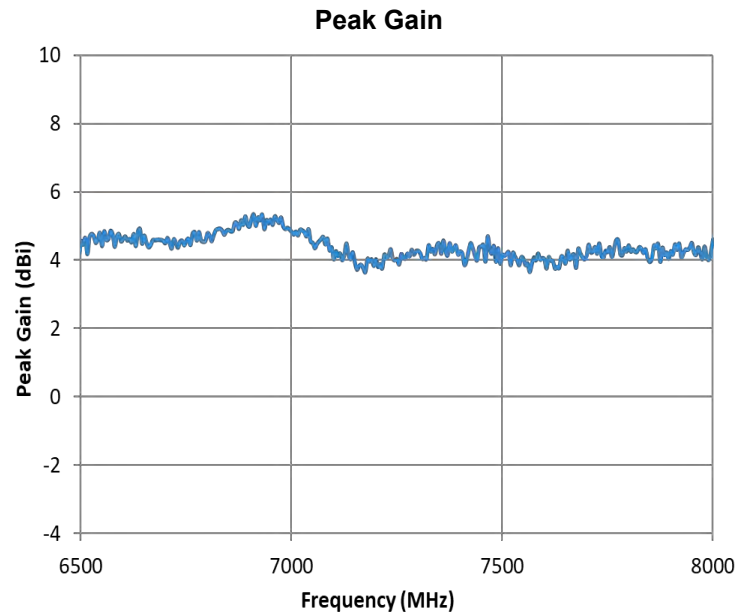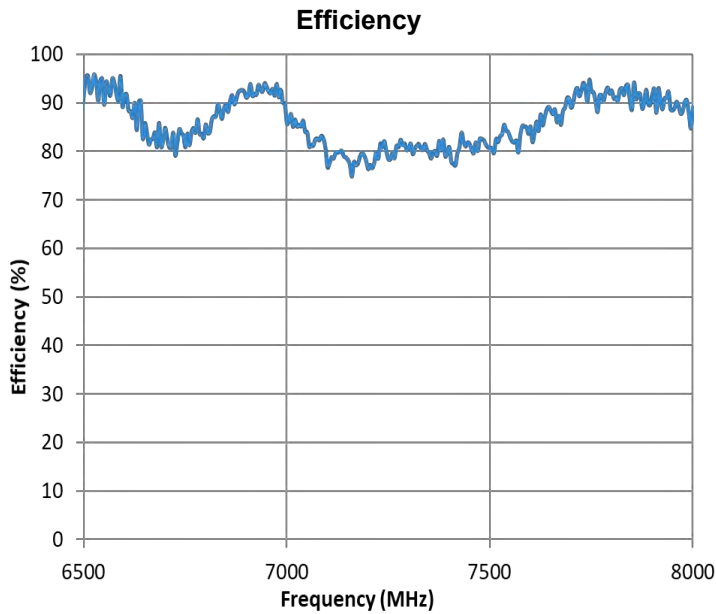- Smart Grid
- OBD-II

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
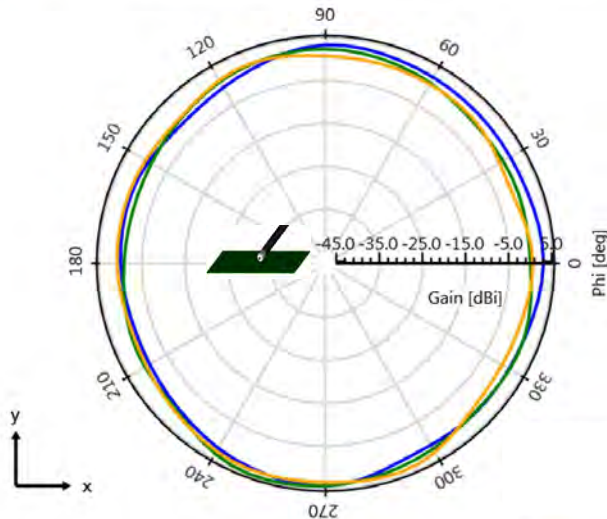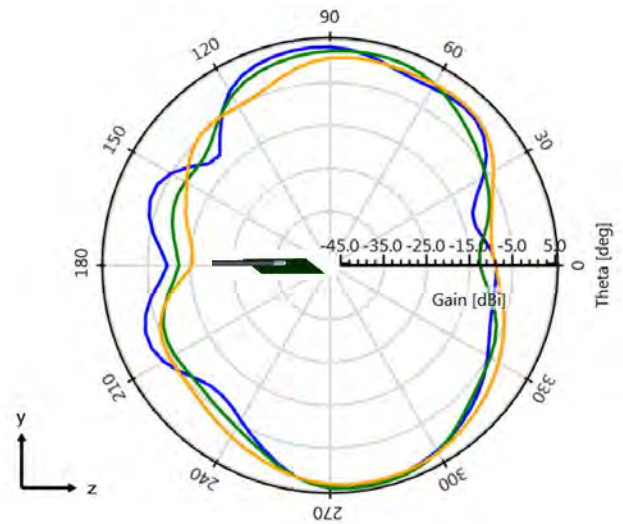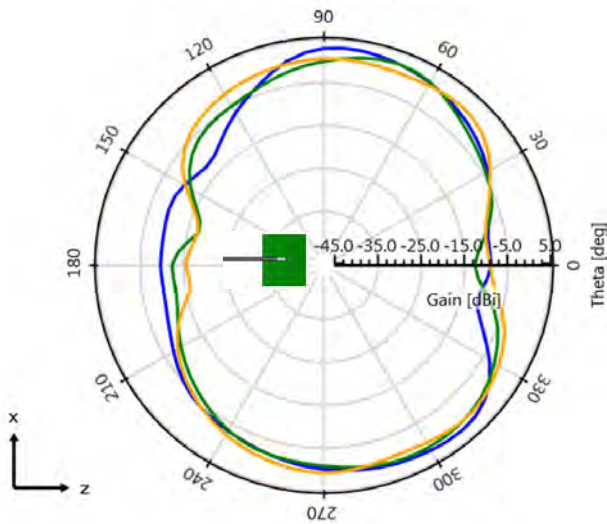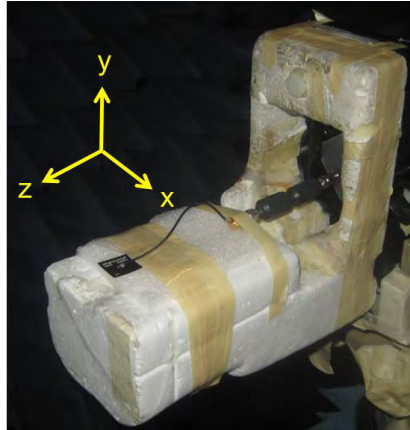Typical Performance using 100 mm cable tested on PC-ABS

VSWR

1005190F0

Efficiency

Peak Gain

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Radiation Patterns Plots

Typical Performance using 100 mm cable tested on PC-ABS
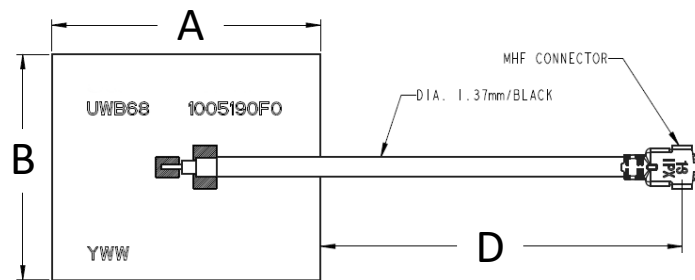Typical Performance @ 6500, 7000, 8000 MHZ

UWB FPC Embedded Antenna Specifications
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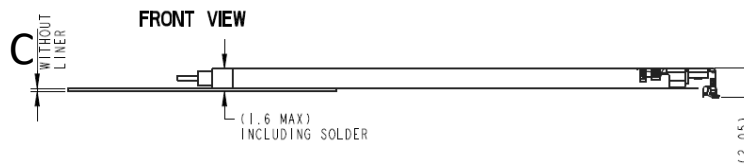
Mechanical Dimensions (MHF Connector)
Typical antenna dimensions (mm)

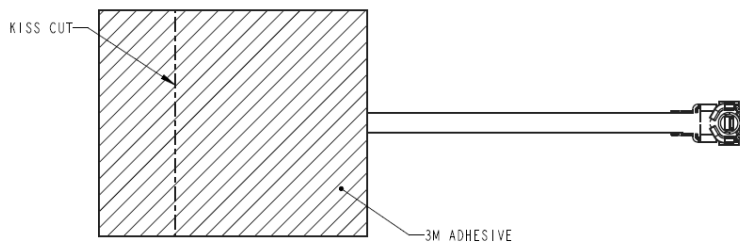| Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Connector Type
1005190F0-AA70L0025	18.6	15.6	0.2	25 ± 3.0	MHF
1005190F0-AA70L0050	18.6	15.6	0.2	50 ± 3.0	MHF
1005190F0-AA70L0075	18.6	15.6	0.2	75 ± 3.0	MHF
1005190F0-AA70L0100	18.6	15.6	0.2	100 ± 3.0	MHF
1005190F0-AA70L0150	18.6	15.6	0.2	150 ± 4.0	MHF
1005190F0-AA70L0200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

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

Top View

Side View

Bottom View