

Part No. 1005188F0

UWB FPC Embedded Antenna

6.0 – 8.5 GHz



KYOCERA AVXs' 1005188F0 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. 1005188F0 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	6.0 – 8.5 GHz
Peak Gain	5.2 dBi
Average Efficiency	82%
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 #	1005188F0
Dimensions (mm)	15.6 x 18.6 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

6000 – 8500 MHz

KEY BENEFITS

Stay-in-Tune

KYOCERA AVXs 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

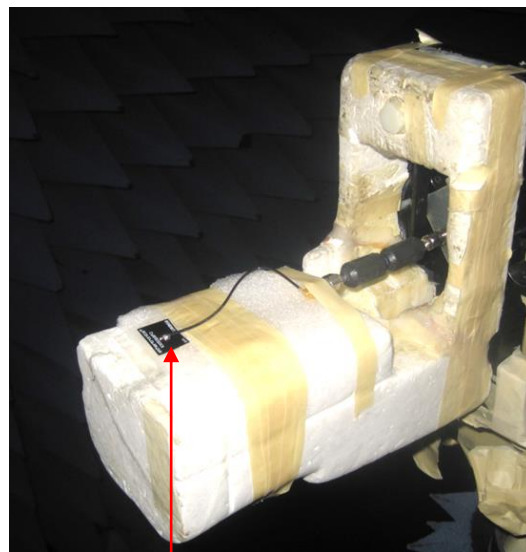
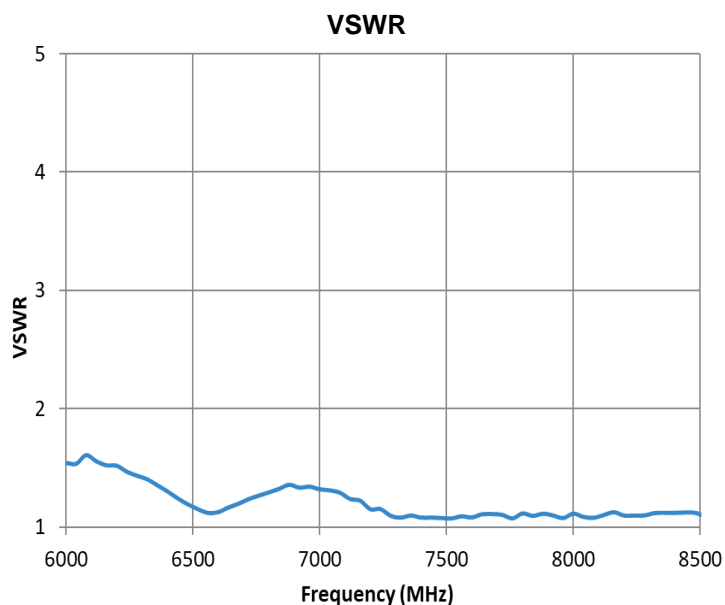
- Gateway,
- Handheld
- Telematics
- Tracking
- Healthcare (FDA Class I)
- Security
- Smart city
- Smart mobility
- Fitness
- Smart Retail
- M2M,
- Industrial devices
- Smart Home

UWB FPC Embedded Antenna Specifications

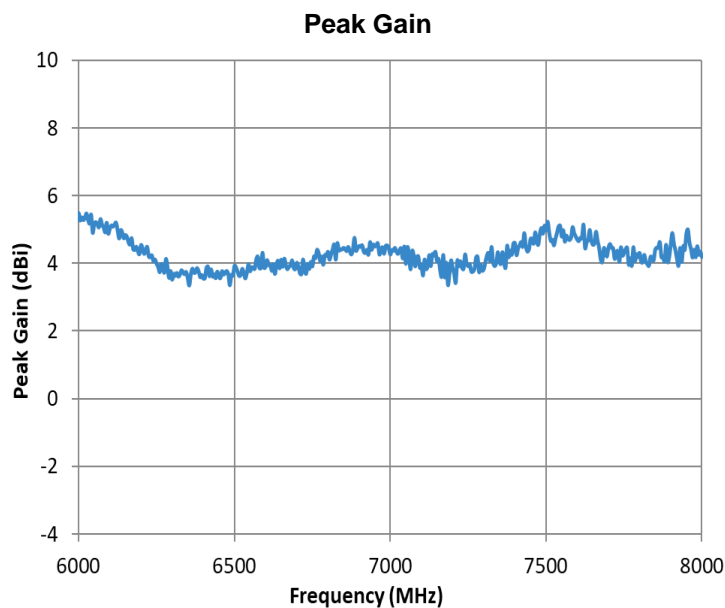
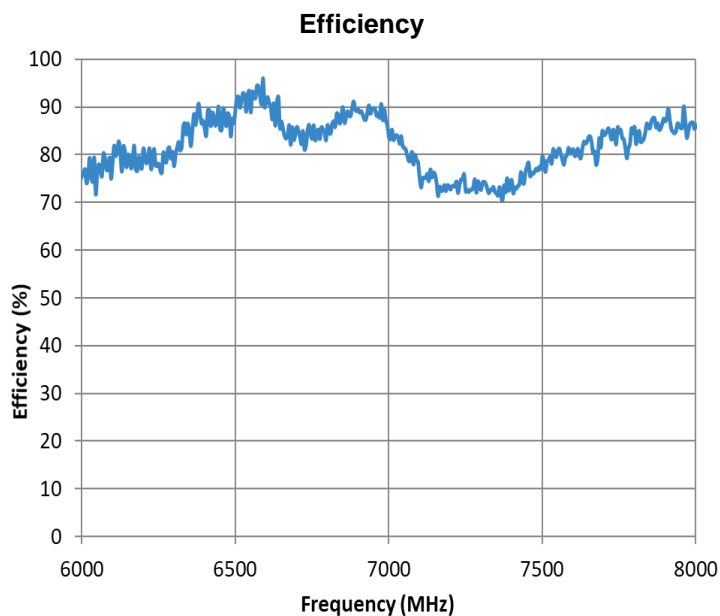
KYOCERA AVXs produces a wide variety of standard and custom antennas to meet user needs.

Typical VSWR, Efficiency and Peak Gain plots

Typical Performance using 100 mm cable tested on PC-ABS



1005188F0



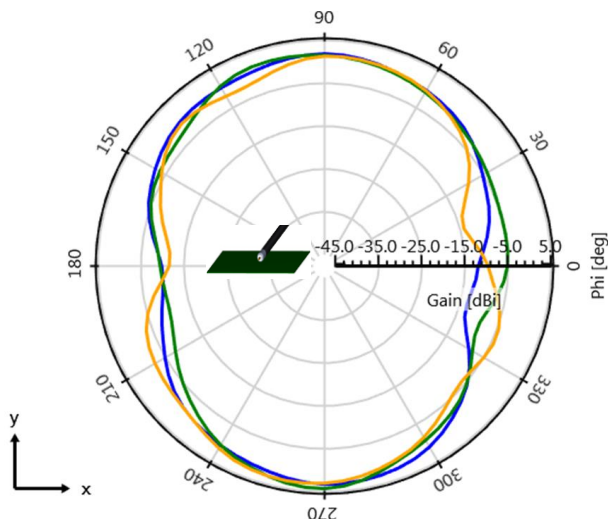
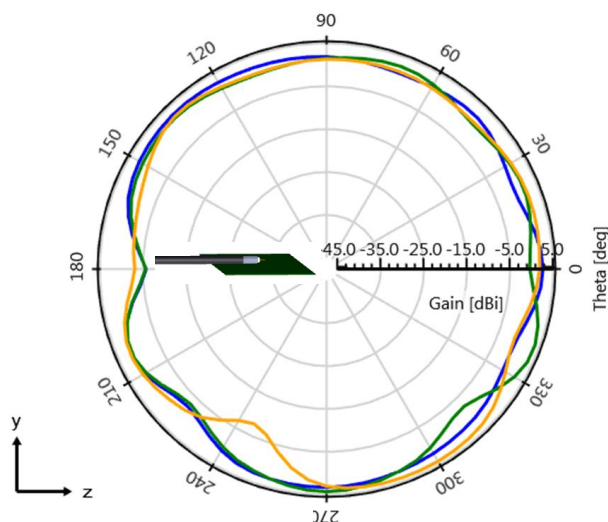
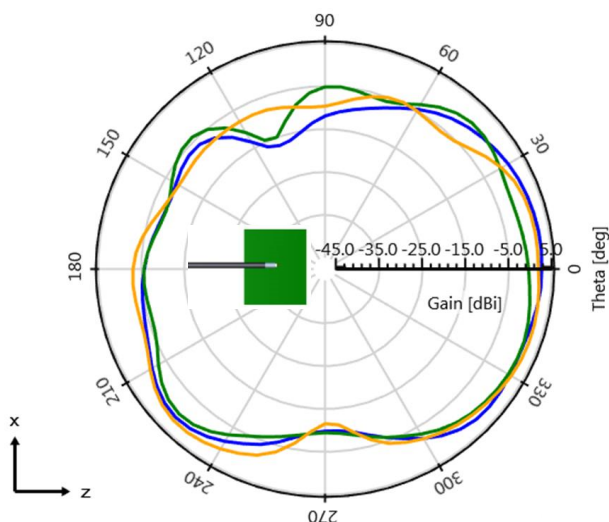
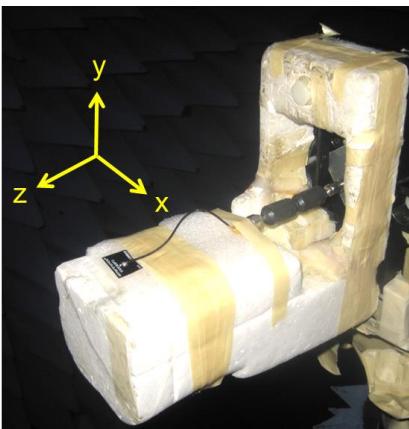
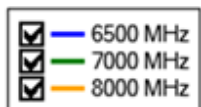
UWB FPC Embedded Antenna Specifications

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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



UWB FPC Embedded Antenna Specifications

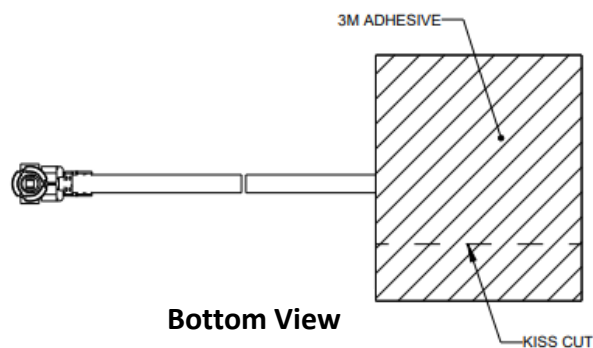
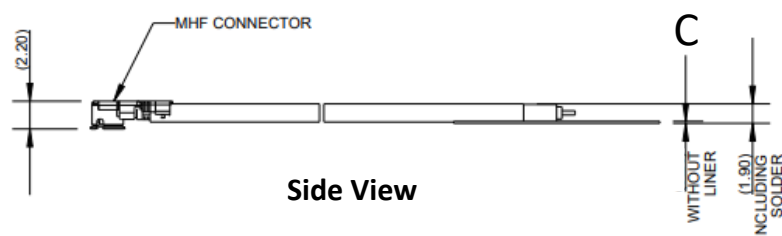
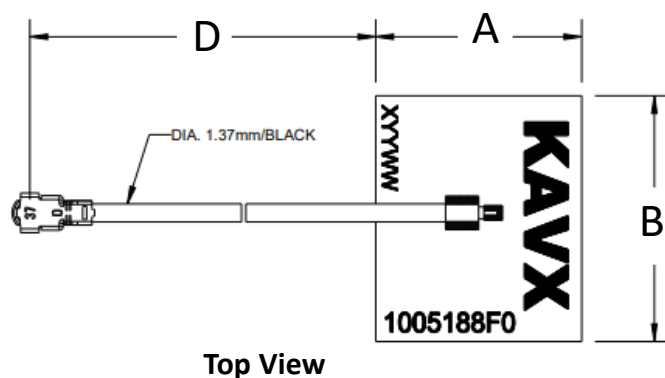
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Mechanical Dimensions (MHF Connector)

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Cable Tolerance	Connector Type
1005188F0-AA70L0100	15.6	18.6	0.2	100	± 3.0	MHF
1005188F0-AA70LXXXX	15.6	18.6	0.2	$25 \leq \text{XXXX} < 143$	± 3.0	MHF
1005188F0-AA70LXXXX	15.6	18.6	0.2	$143 \leq \text{XXXX} < 293$	± 4.0	MHF
1005188F0-AA70LXXXX	15.6	18.6	0.2	$293 \leq \text{XXXX} < 500$	± 5.0	MHF

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



UWB FPC Embedded Antenna Specifications

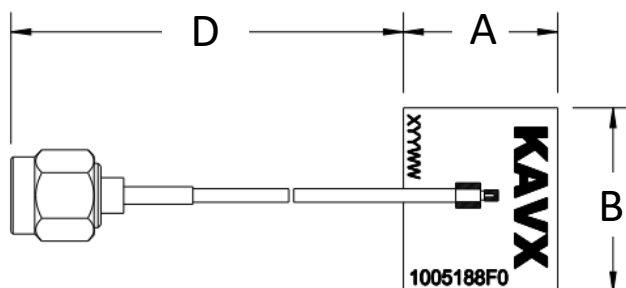
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Mechanical Dimensions (SMA Male Connector)

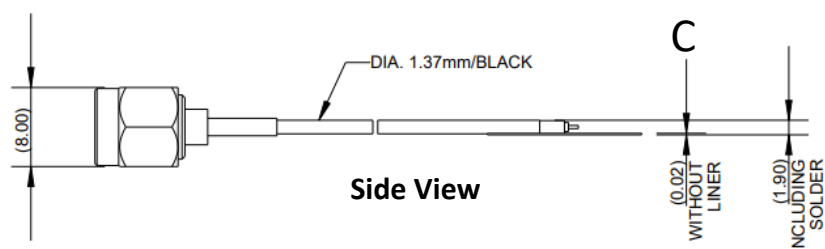
Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	*D (mm)	Cable Tolerance	Connector Type
1005188F0-AS70L0100	15.6	18.6	0.2	100	± 3.0	SMA Male
1005188F0-AS70LXXXX	15.6	18.6	0.2	$25 \leq \text{XXXX} < 143$	± 3.0	SMA Male
1005188F0-AS70LXXXX	15.6	18.6	0.2	$143 \leq \text{XXXX} < 293$	± 4.0	SMA Male
1005188F0-AS70LXXXX	15.6	18.6	0.2	$293 \leq \text{XXXX} < 500$	± 5.0	SMA Male

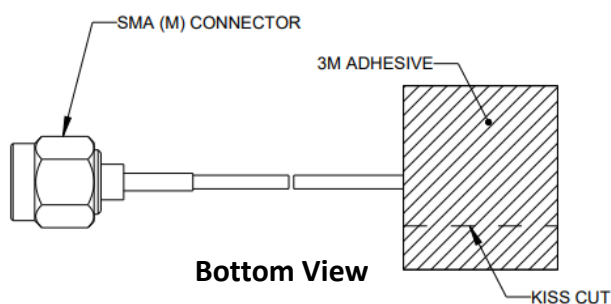
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Top View



Side View



Bottom View