



DATASHEET Part No. 1005193 Product: UWB PCB Antenna with SMA Connector

Part No. 1005193 **UWB PCB Antenna with SMA Connector**

6.0 – 8.5 GHz

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



KYOCERA AVX's 1005193 is a versatile off-board UWB PCB antenna optimized for applications spanning 6.0 - 8.5 GHz where off-board implementation is advantageous and necessary. The 1005193 antenna incorporates a rigid mounting structure through an SMA connection allowing for ease of assembly to any device.

Electrical Specifications

Typical Performance using antenna with SMA connector in Free-space.

Frequency	6.0 – 8.5 GHz			
Peak Gain	6.0 dBi			
Average Efficiency	80%			
VSWR Match	2.0 :1 max			
Feed Point Impedance	50 ohms unbalanced			
Polarization	Linear			
Operation Temperature	re -40 to +85 °C			
Power Handling	10 Watt			

Mechanical Specifications & Ordering Part Number

Ordering Part #	1005193
Dimensions (mm)	18.6 x 20.6 x 0.8
Weight (grams)	2.7 ~ 4.3
Connector (mm)	SMA compatible connector
Mounting	Screw Mount
Storage Temperature (°C)	-40 to +85
Packaging	PE bags

*Additional variations available with different connectors.

UWB PCB 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.

Reliability

Products are the latest RoHS version compliant

APPLICATIONS

- Embedded Healthcare • design M2M.
- Radar
- Industrial Gateway, devices Access Point • Smart Grid
- Handheld OBD-II
- Telematics
- Tracking

Proprietary



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UWB PCB antenna with SMA connector 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 antenna with SMA connector in Free-space.





1005193







UWB PCB antenna with SMA connector Specifications KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Radiation Patterns Plots

Typical Performance using antenna with SMA connector in Free-space. Typical Performance @ 6500, 7000, 8000 MHZ







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Mechanical Dimensions

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C (mm)	D (mm)	*Connector Type
1005193-A01	18.6 ± 0.2	20.6 ± 0.2	0.8	33.46	SMA Male
1005193-B02	18.6 ± 0.2	20.6 ± 0.2	0.8	29.49	SMA Female

*Additional variations available with different connectors.







Side View



Top View



Side View