



DATASHEET

Part No. 1000418 Product: Wi-Fi / BT / Wi-Fi 6E / Embedded Stamp Metal Antenna

Part No. 1000418

WLAN BT Zigbee Wi-Fi 6E Embedded Stamped Metal Antenna

2.4 GHz. 5 GHz, 6 GHz

Supports: Wi-Fi applications, Agriculture, Wi-Fi 6E, Bluetooth, Zigbee, WLAN, Smart Home, Healthcare, Digital Signage



KYOCERA AVX WLAN antennas use specific technology in a trace configuration to provide high performance. This antenna has unique features enabling limited range RF tuning. KYOCERA AVX antennas requires a smaller design keep-out area, carry lower program development risk which yields a quicker time-to-market, without sacrificing RF performance.

Wi-Fi / Wi-Fi 6E Stamp Metal Embedded Antenna

2.400 – 2.485 GHz

5.150 - 5.825 GHz

5.925 - 7.125 GHz

KEY BENEFITS

Stay-in-Tune

KYOCERA AVX 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

Embedded • design •
Cellular, • Headsets, • Tablets
Gateway,

TelematicsTracking

Healthcare
M2M, Industrial devices

Access • Smart Grid • OBD-II

Handheld

Electrical Specifications

Typical Characteristics in Free Space with 100 mm cable

Frequency (GHz)	2.400 – 2.485	5.150 – 5.825	5.925 - 7.125		
Peak Gain	4.0 dBi	4.2 dBi	4.6 dBi		
Average Efficiency	70%	70%	72%		
VSWR Match	<1.5:1	<2.0:1	<2.4:1		
Feed Point Impedance	50 ohms unbalanced				
Polarization	Linear				
Power Handling	0.5 Watt CW				

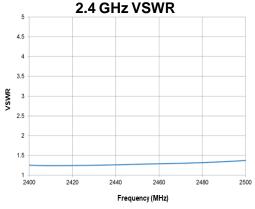
Mechanical Specifications & Ordering Part Number

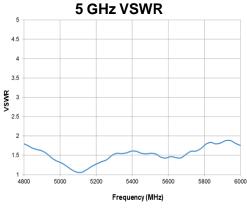
Ordering Part Number	1000418	
Size (mm)	45.0 x 11.3 x 5.1	
Weight (grams)	1.6	
Operating Temperature	-40°C to +85°C	
Storage Conditions	Temperature 20°C - 25°C, Humidity 20% - 75%	
Mounting	(Apply with Plastic Screw) Non-Metallic Surface: Mount antenna directly Metallic Surface: > 12 mm air gap	
Connectors	U.FL compatible receptacle on the PCB	
Cable Length	Cables sold separately, please contact KYOCERA AVX	
Packing	Tray	

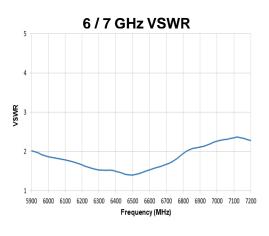


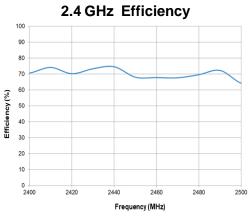
VSWR, Efficiency and Peak Gain Plots

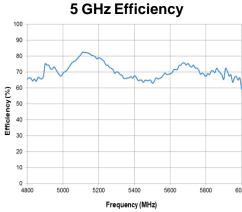
Typical Characteristics in Free-space with 100 mm cable

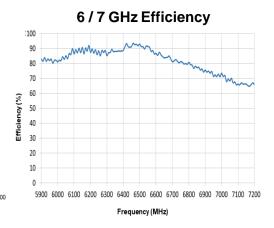


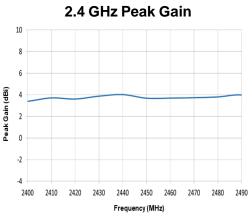


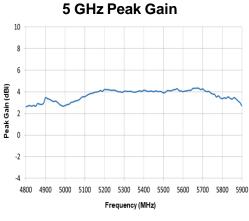


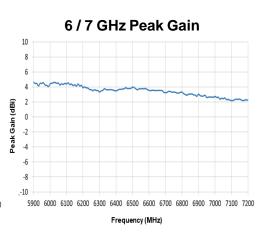










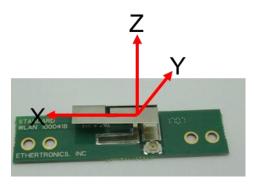


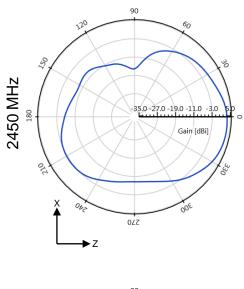


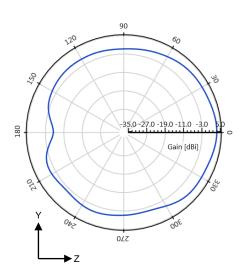
Antenna Radiation Patterns

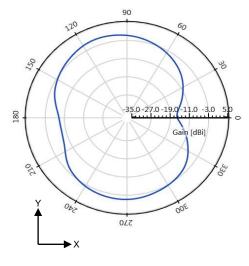
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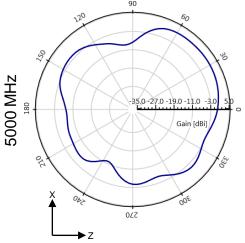
Measured @ 2450, 5000 MHz

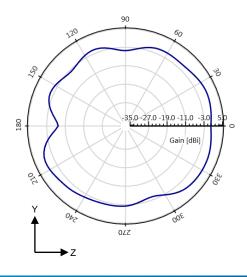


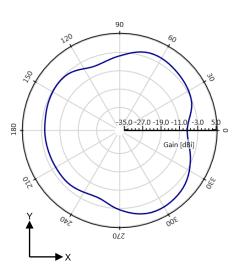










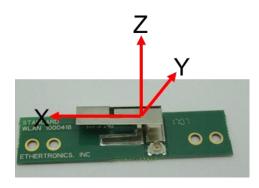


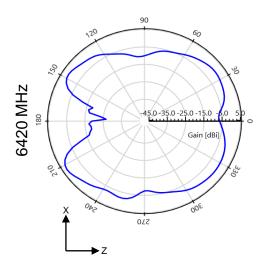


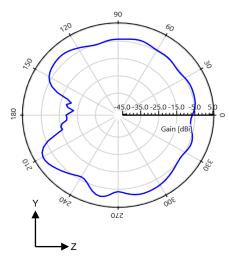


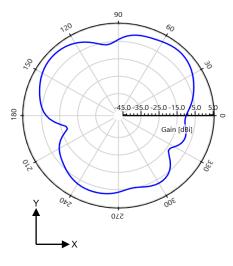
Antenna Radiation Patterns

Typical Performance in Free-space Measured @ 6420 MHz







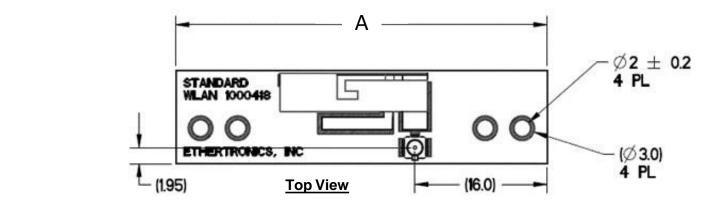


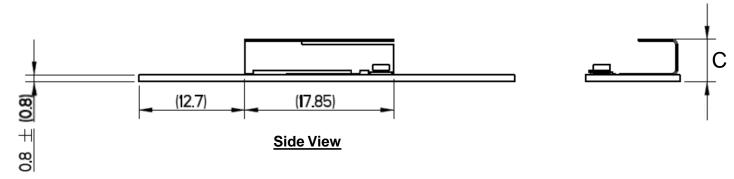


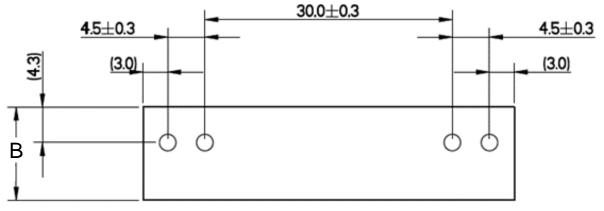
Mechanical Dimensions

Typical antenna dimensions measured in mm. Dimensions in () parenthesis are Reference Only.

Part Number	Α	В	С
1000418	(45.0)	(11.3)	(5.1)







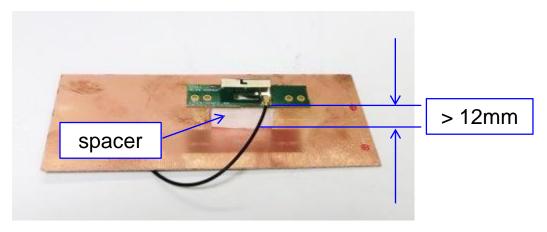
Bottom View





Mounting Recommendations (On-Ground)

Typical antenna dimensions (mm)



*Recommended minimum spacing when the 1000418 antenna is installed over a ground plane

Precaution of Use

Precaution of sharp edges on metal and PCB.



Packing

Dimensions in mm

The antenna is derived in trays with 54 pieces in each.

The outer box is 395 x 295 x 285 mm and contains 10 trays.

