

Part No. 1000418

WLAN BT Zigbee Wi-Fi 6E/7 Embedded Stamped Metal Antenna

2.4 GHz, 5 GHz, 6 GHz

Supports: Wi-Fi applications, Wi-Fi 6E, Bluetooth, Zigbee, WLAN



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/7 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
- Handheld
- Smart Home
- Telematics
- Tracking
- Healthcare
- M2M, Industrial devices
- Smart Grid
- OBD-II

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		

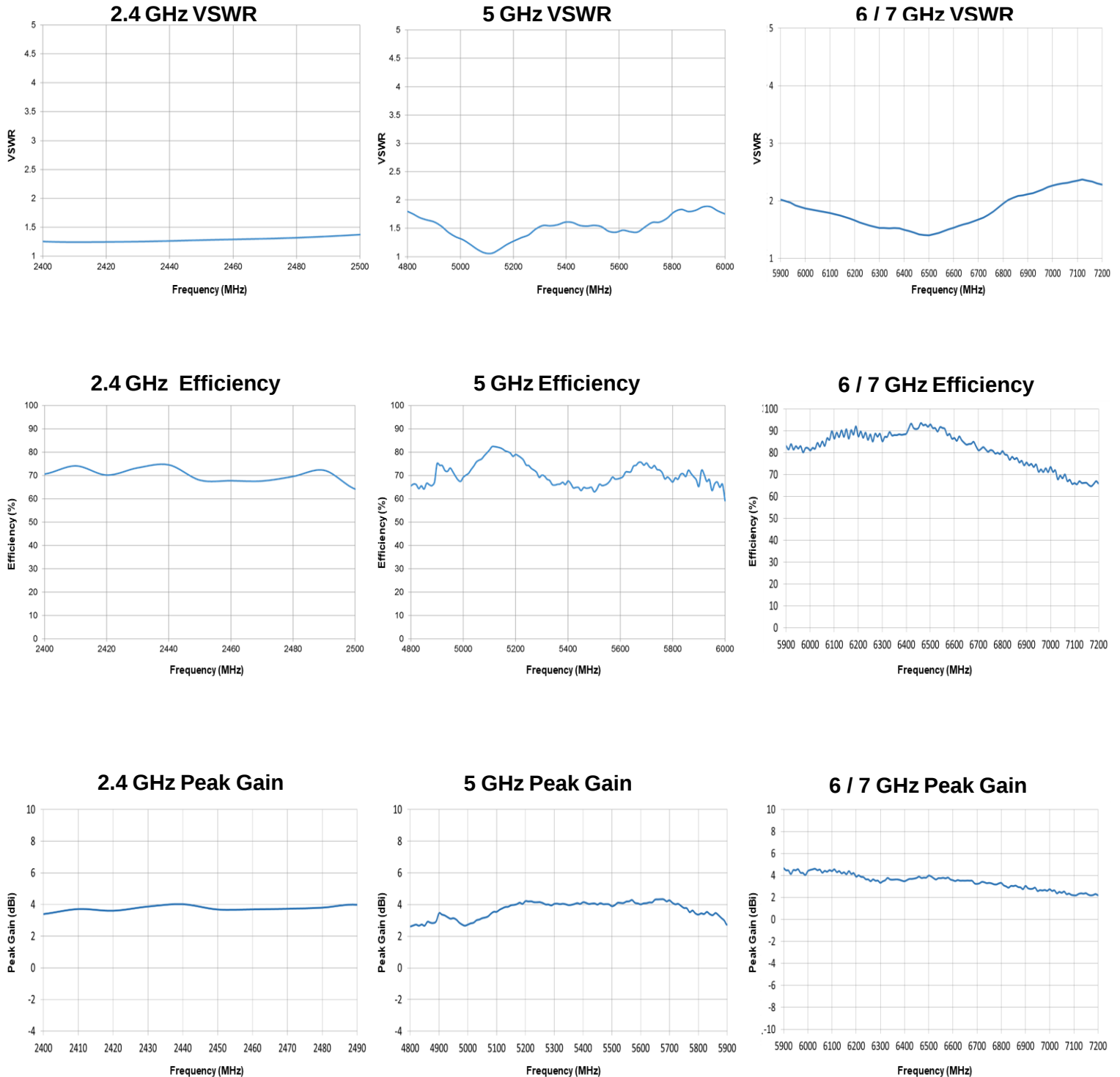
Mechanical Specifications & Ordering Part Number

Ordering Part Number	1000418
Size (mm)	45.0 x 11.3 x 5.1
Weight (grams)	1.6
Mounting Type(s)	Screw Mount
Cable(s) and Connector(s)	Receptacle U.FL compatible on PCB
Standard(s) Compliance	RoHS, WEEE
Notes / Remarks	PCB, COLOR BLACK
Additional Resources	Download 3D FIT File

Wi-Fi 6 & Wi-Fi 6E/7 KYOCERA AVX Embedded Antenna Specifications
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

VSWR, Efficiency and Peak Gain Plots

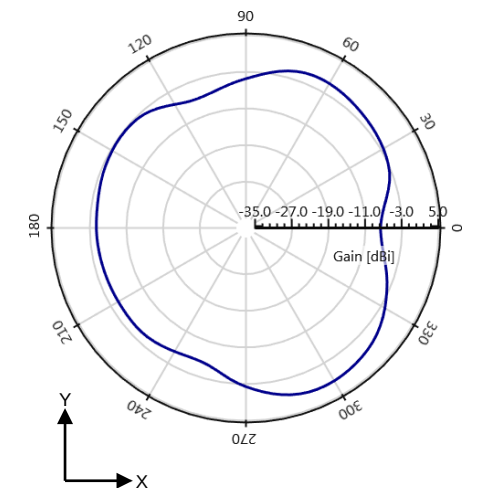
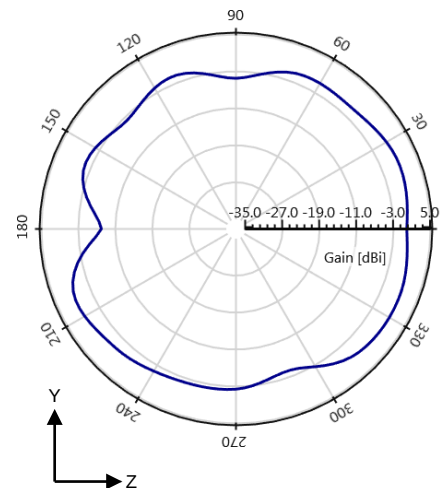
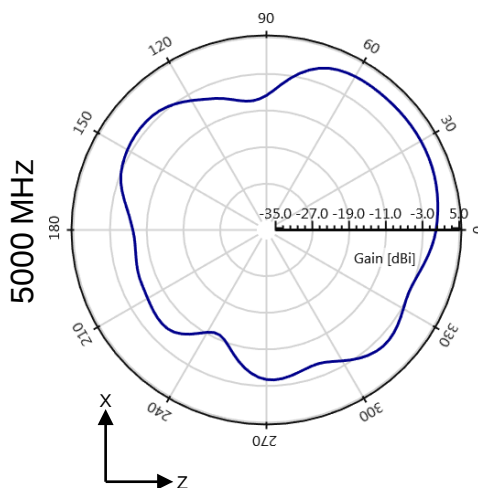
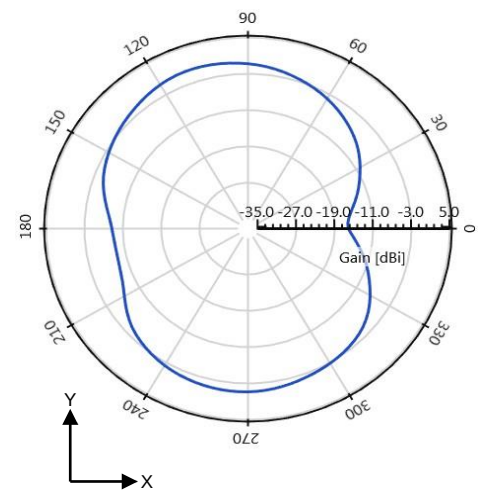
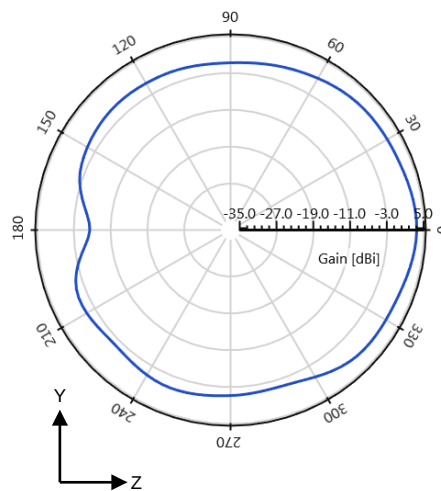
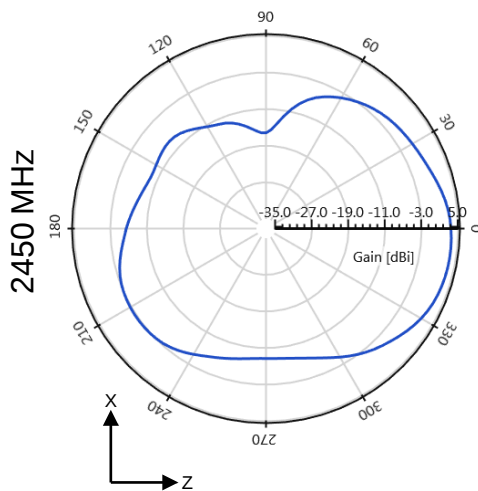
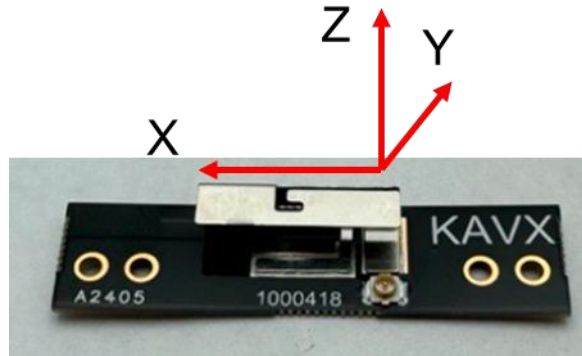
Typical Characteristics in Free-space with 100 mm cable



Wi-Fi 6 & Wi-Fi 6E/7 KYOCERA AVX Embedded Antenna Specifications
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Antenna Radiation Patterns

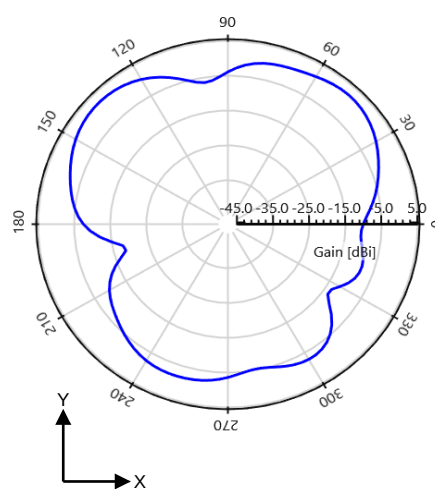
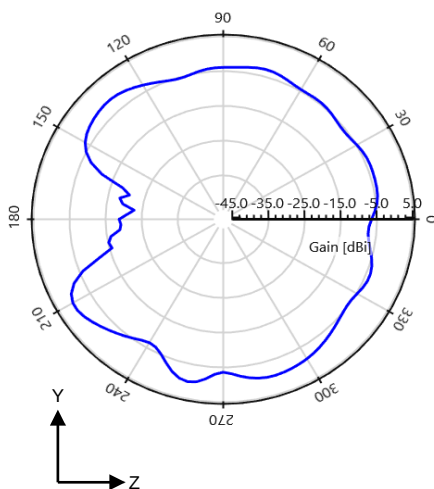
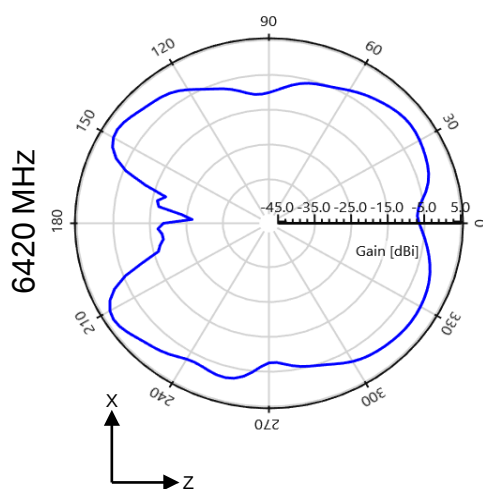
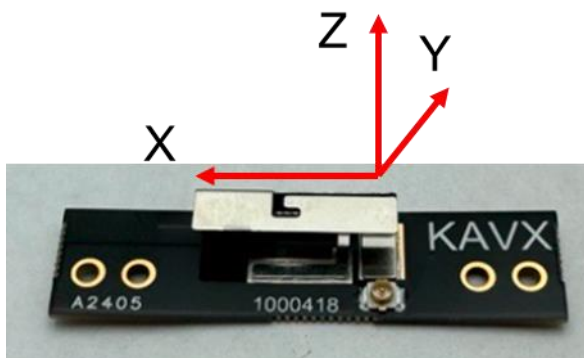
Typical Characteristics in Free-space with 100 mm cable
Measured @ 2450, 5000 MHz



Wi-Fi 6 & Wi-Fi 6E/7 KYOCERA AVX Embedded Antenna Specifications KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

Antenna Radiation Patterns

Typical Performance in Free-space
Measured @ 6420 MHz



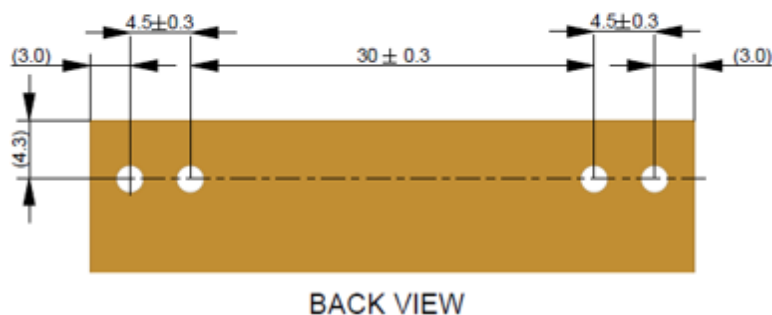
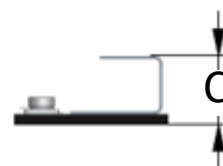
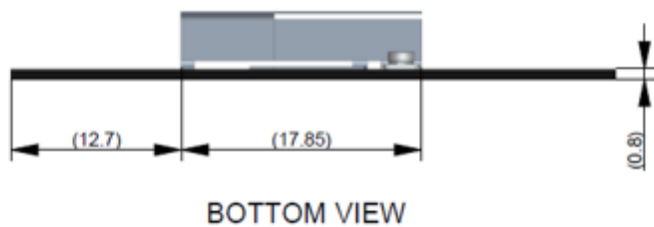
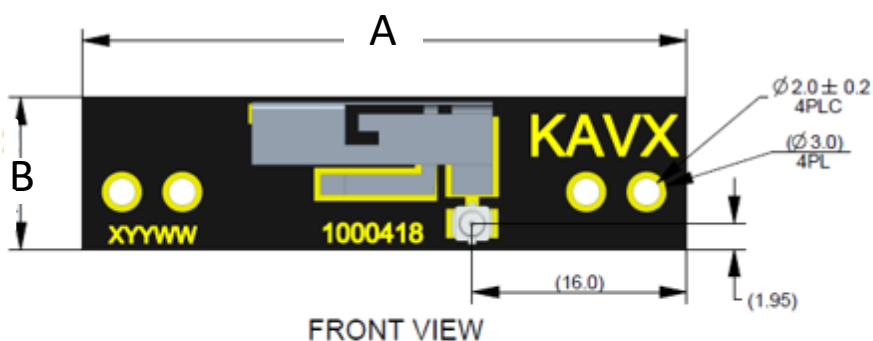
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Mechanical Dimensions

Typical antenna dimensions measured in mm.

Dimensions in () parenthesis are Reference Only.

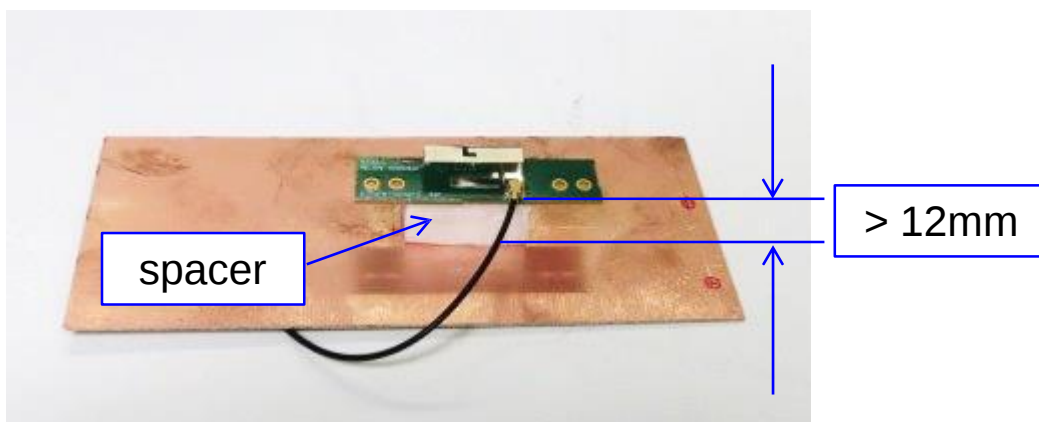
Part Number	A	B	C
1000418	45 ± 0.2	(11.3 ± 0.2)	(5.1)



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Mounting Recommendations (On-Ground)

Typical antenna dimensions (mm)



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

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Additional Resources - 1000418

3D FIT File:

https://www.kyocera-avx.com/download/antennas/ME-FIT/1000418_ME_fit.zip