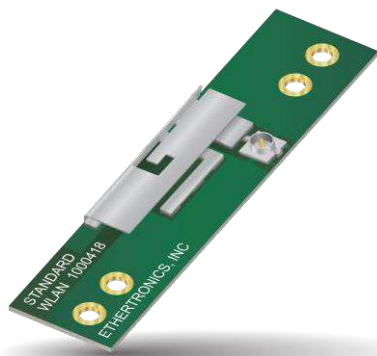


# Part No. 1000418

## 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, Access Point
- Handheld
- 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		

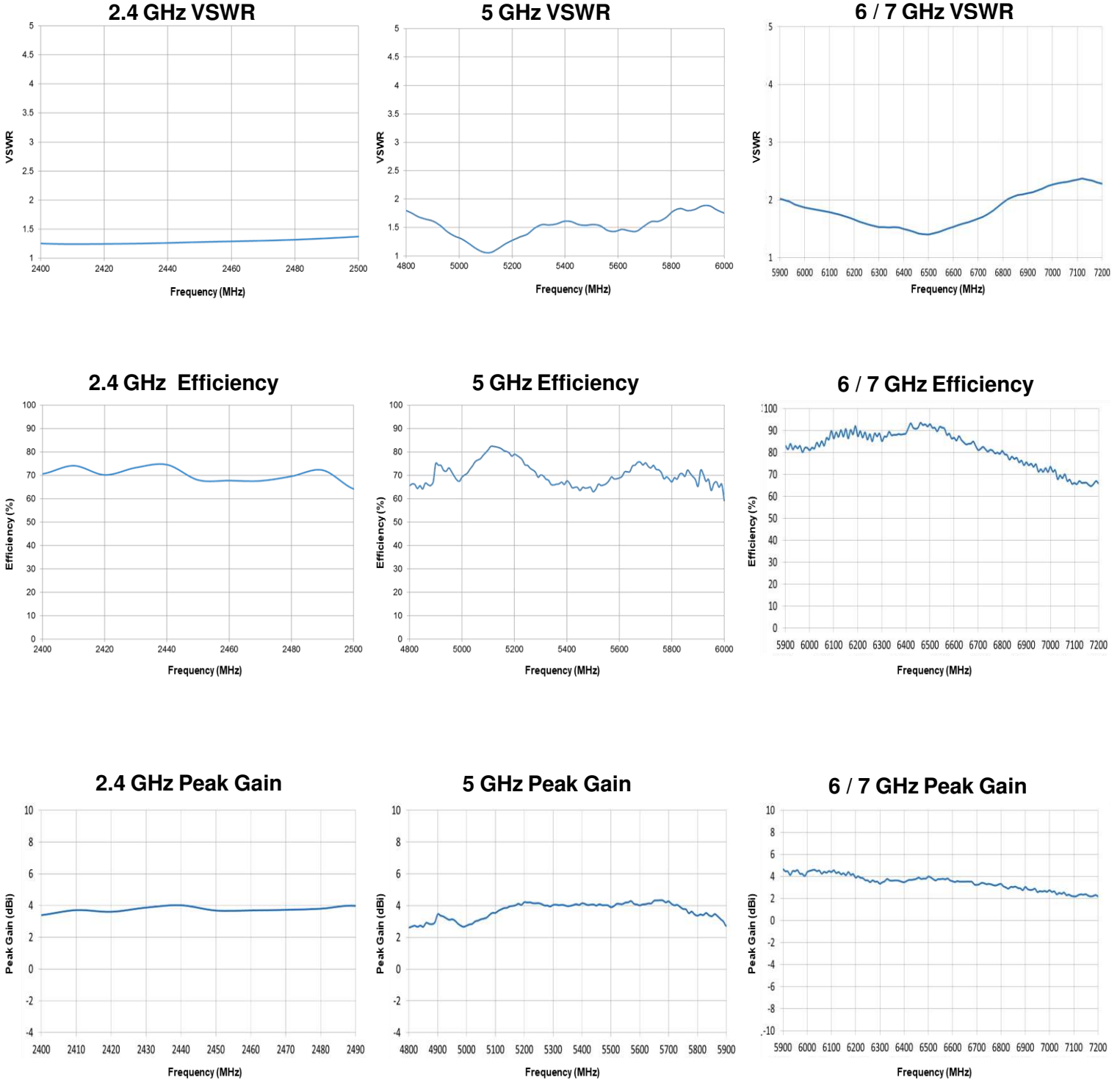
### Mechanical Specifications & Ordering Part Number

Ordering Part Number	1000418
Size (mm)	45.0 x 11.3 x 5.1
Weight (grams)	1.6
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

**Wi-Fi 6 & Wi-Fi 6E 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**

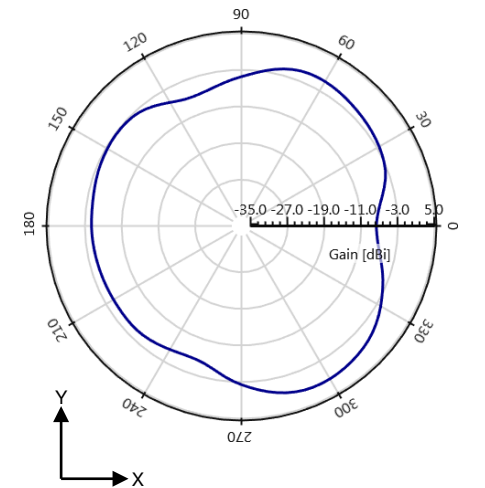
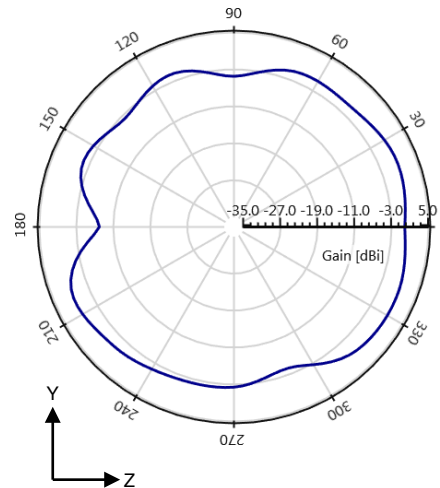
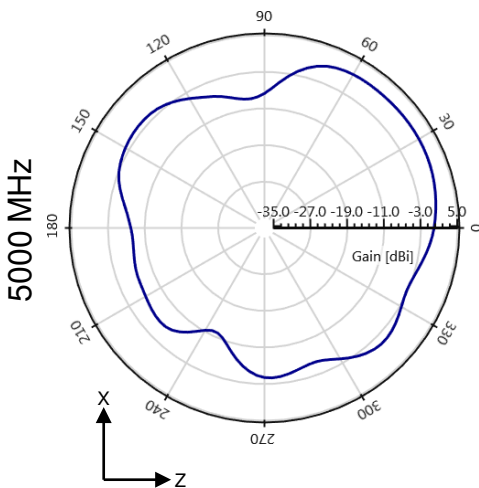
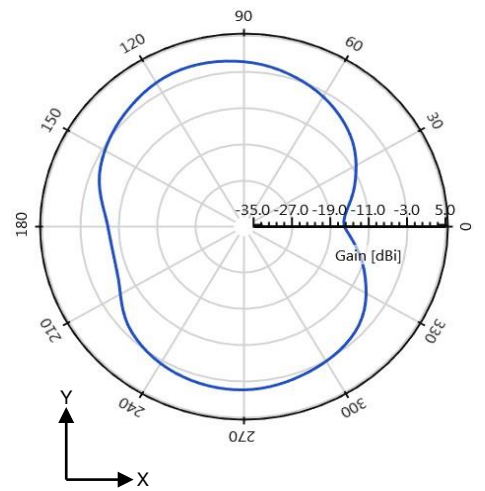
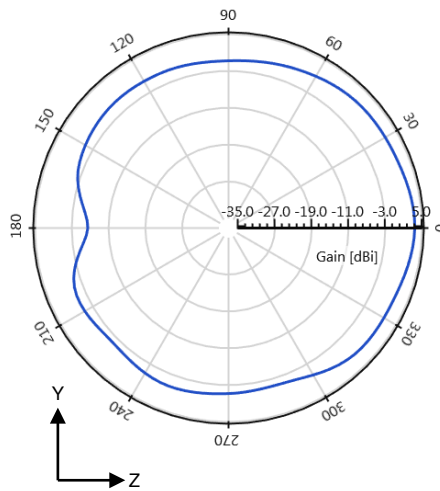
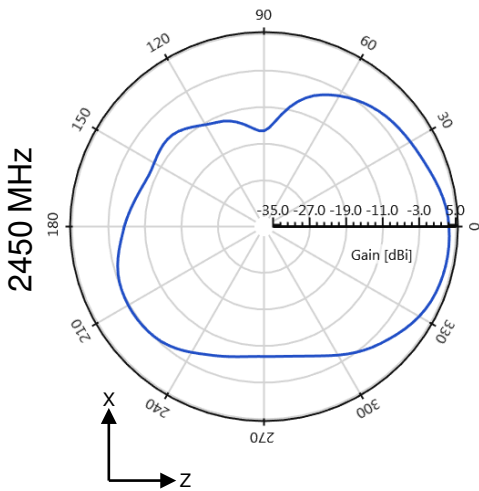
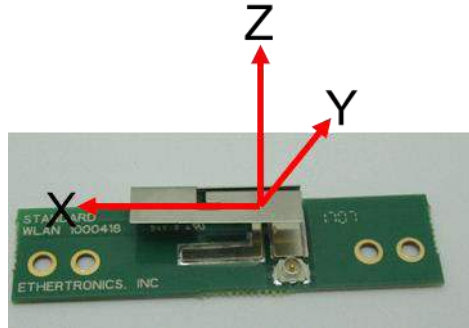
Typical Characteristics in Free-space with 100 mm cable



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

Antenna Radiation Patterns

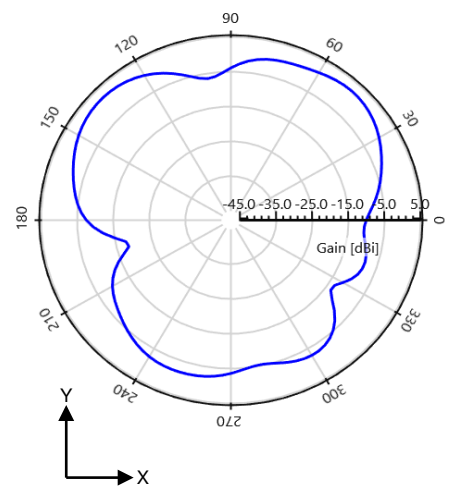
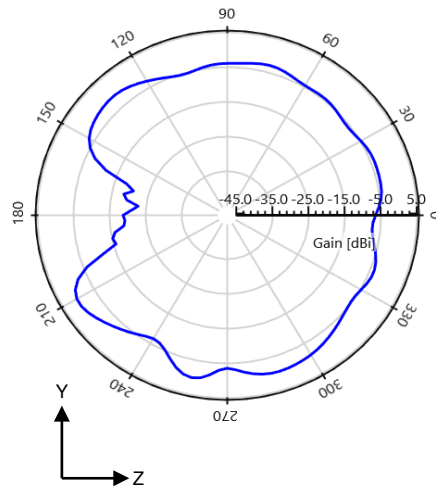
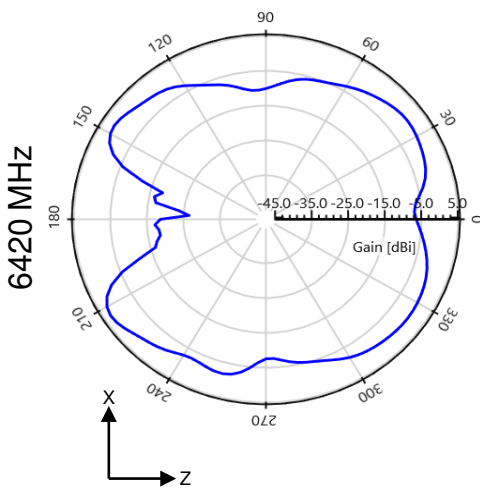
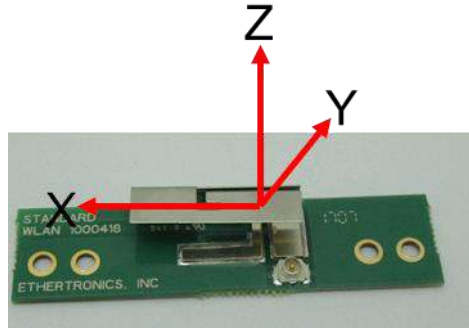
Typical Characteristics in Free-space with 100 mm cable  
 Measured @ 2450, 5000 MHz



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

Typical Performance in Free-space  
 Measured @ 6420 MHz

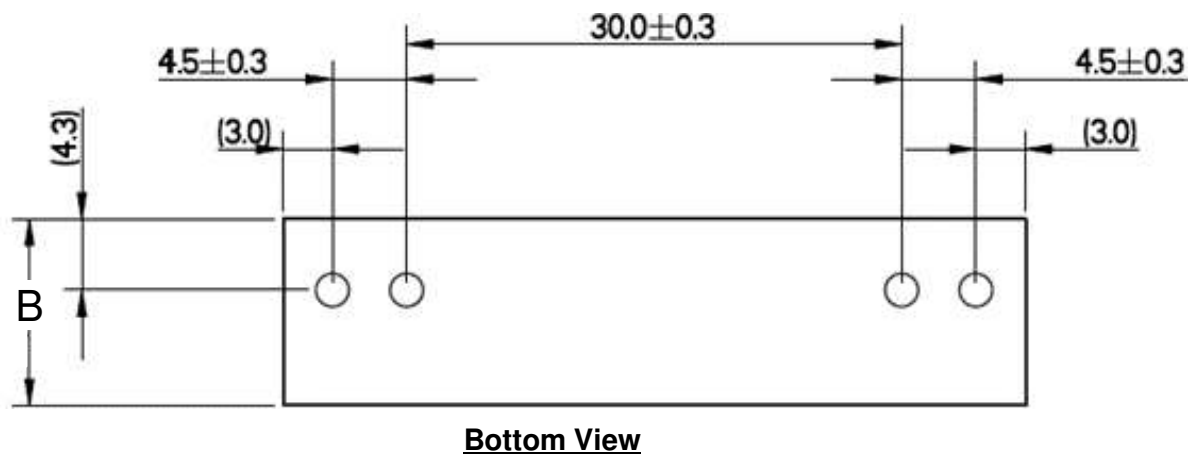
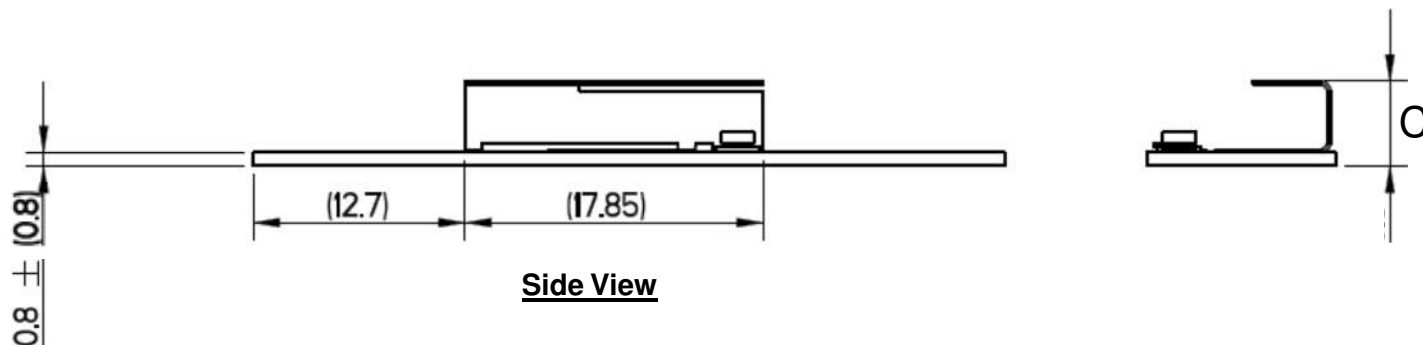
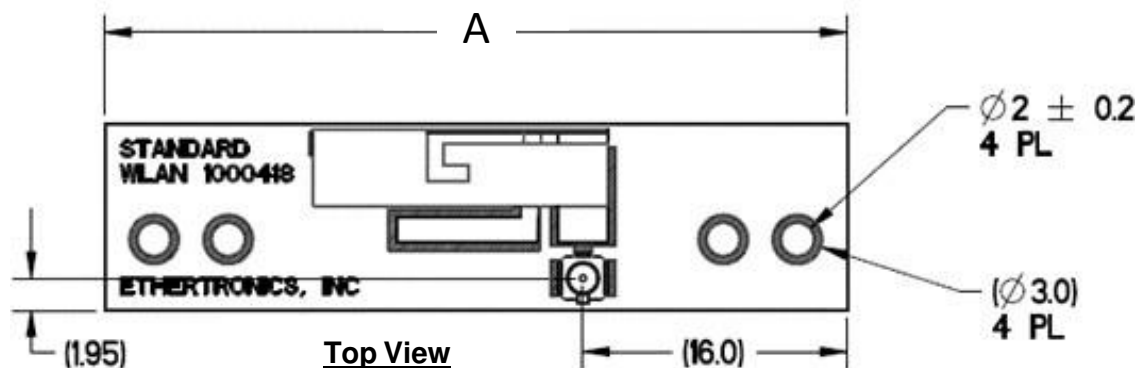


Wi-Fi 6 & Wi-Fi 6E KYOCERA AVX Embedded Antenna Specifications  
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs.

**Mechanical Dimensions**

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

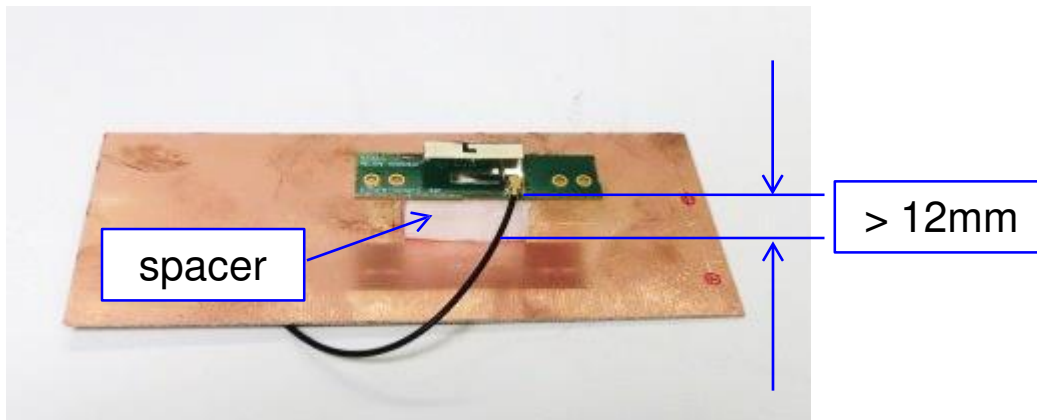
Part Number	A	B	C
1000418	(45.0)	(11.3)	(5.1)



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

### 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.

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

**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.

