

# Part No. 9003005C0

## Wi-Fi/ BT/ Zigbee Ceramic Patch 2.4 GHz Antenna

2400 – 2480 MHz

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



KYOCERA AVX's 9003005C0 is a 2.4 GHz ceramic patch antenna with high efficiency on all frequency bands. This antenna delivers good functionality and performance and provides compelling advantages to the device designers for their Wi-Fi enabled applications. This antenna has 60mm cable terminated in a MMCX ST-Plug (male) connector..

### Best in Class Performance

Circularly Polarized patch antennas are designed to maintain high efficiency in a variety of device configurations. High selectivity eliminates the need for additional filters and frees up board space.

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#### KEY BENEFITS

##### Reduced Costs and Time-to-Market

Standard antenna eliminates design fees and cycle time associated with a custom solution; getting products to market faster.

##### 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

- Home Automation
- Security and surveillance
- Smart appliances
- Energy & utilities
- M2M industrial devices
- Industrial IoT devices

### Electrical Specifications

Typical Characteristics in free-space

Frequency	2400 – 2480 MHz
Return Loss	< -7.8 dB
Peak Gain	2.5 dBi
Average Efficiency	65%
Polarization	R.H.C.P
Impedance	50 ohm
Axial Ratio	< 2.07 dB

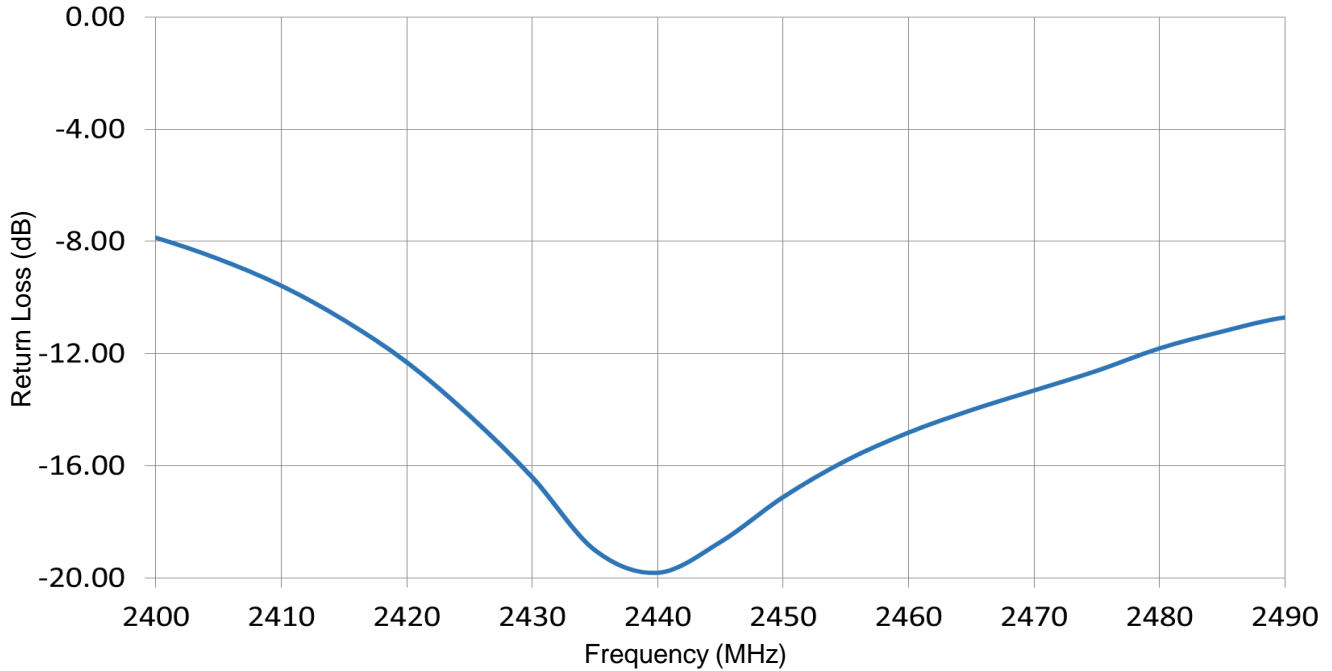
### Mechanical Specifications & Ordering Part Number

Ordering Part Number	9003005C0-AM20L0060
Size (mm)	25.0 x 25.0 x 4.0
Cable/Connector (mm)	Length: 60.0, Diameter: 1.13, Color: Black, MMCX ST-Plug (male)
Weight (grams)	10.0
Packaging	Tray
Impedance	50 ohm

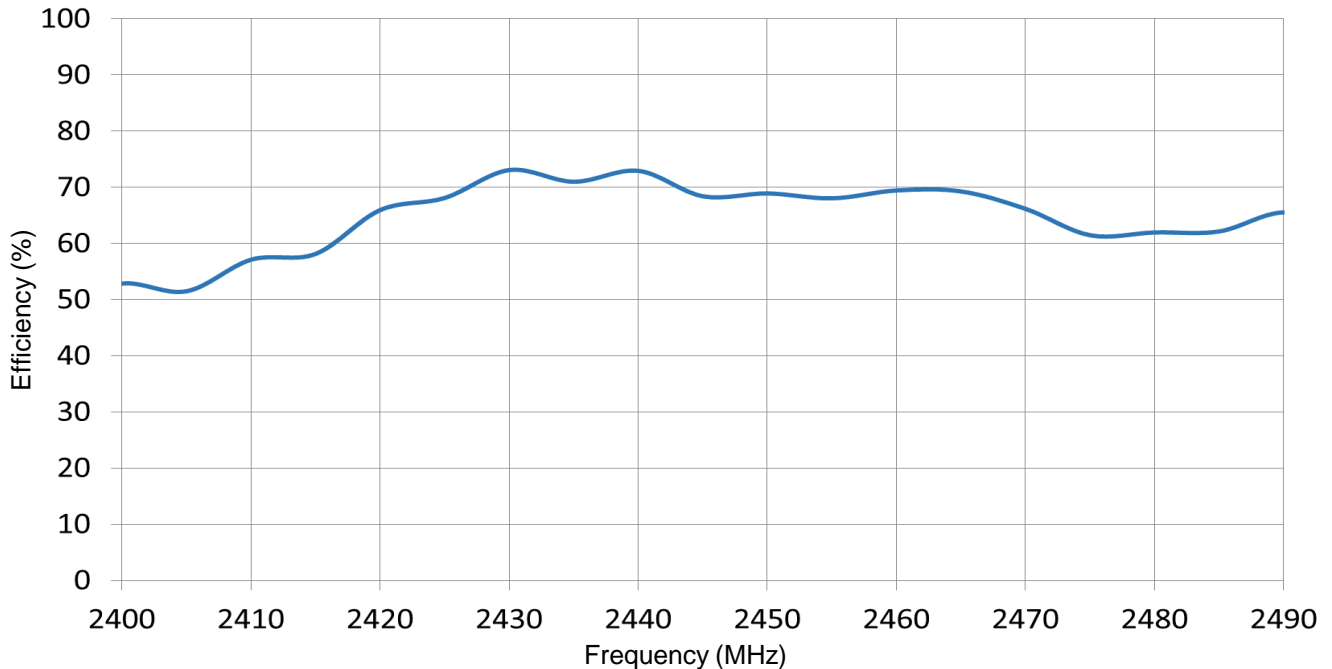
**2.4 GHz KYOCERA AVX Cabled Ceramic Patch Antenna Specifications**  
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

**Return Loss and Efficiency Plots**  
 Typical performance in free-space.

**Return Loss**



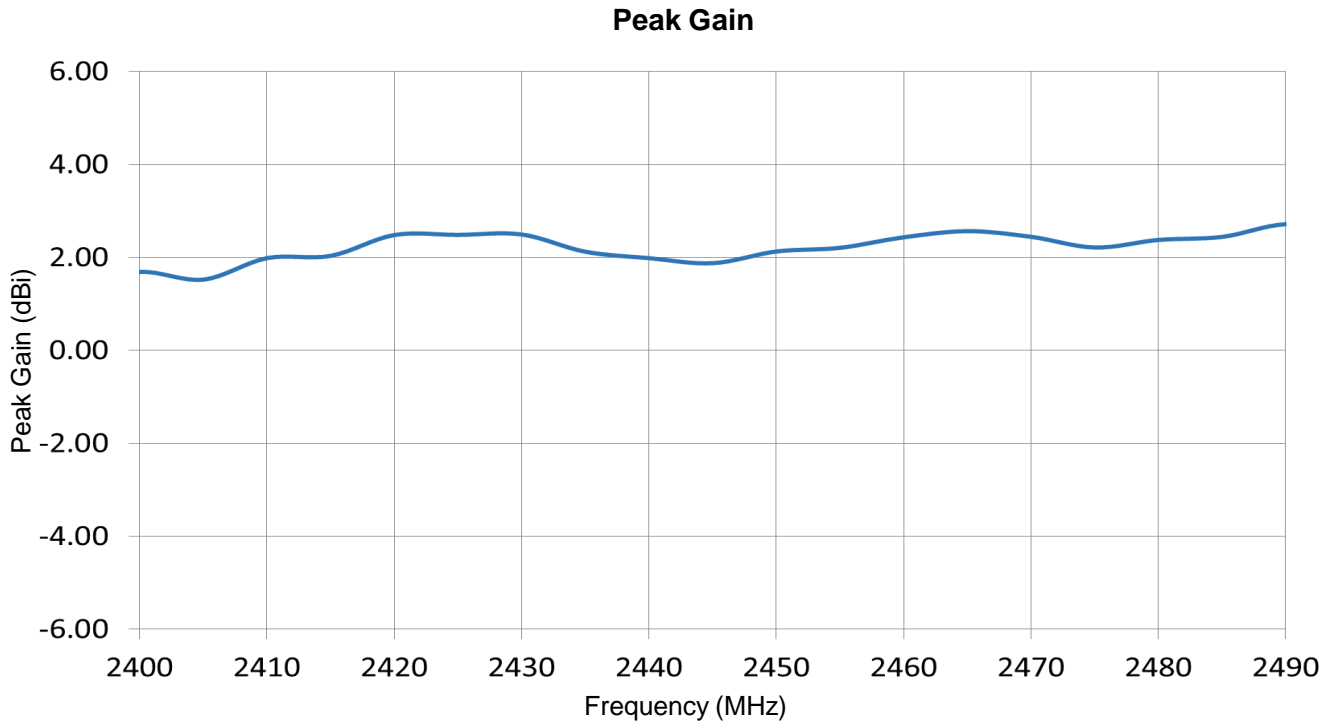
**Efficiency**



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**Peak Gain Plot**

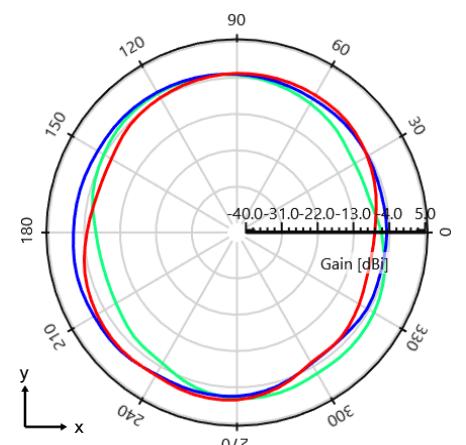
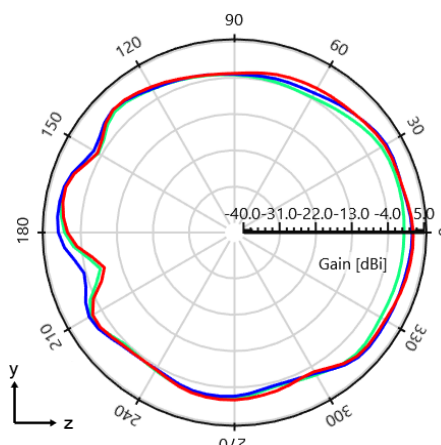
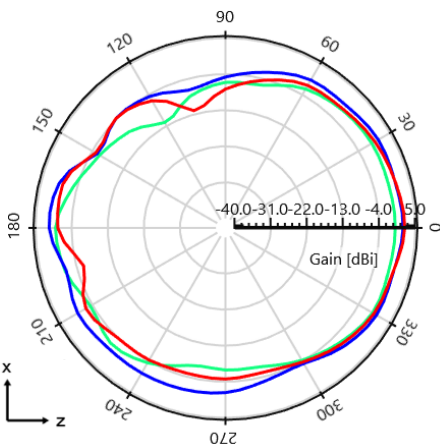
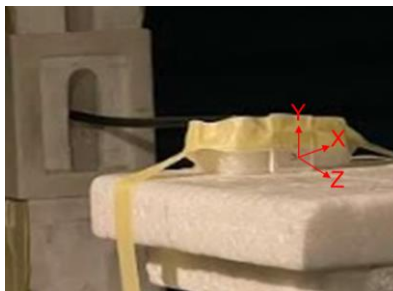
Typical performance in free-space.



**Antenna Radiation Patterns**

Typical performance in free-space.  
 Measured at (2400, 2440, 2480) MHz

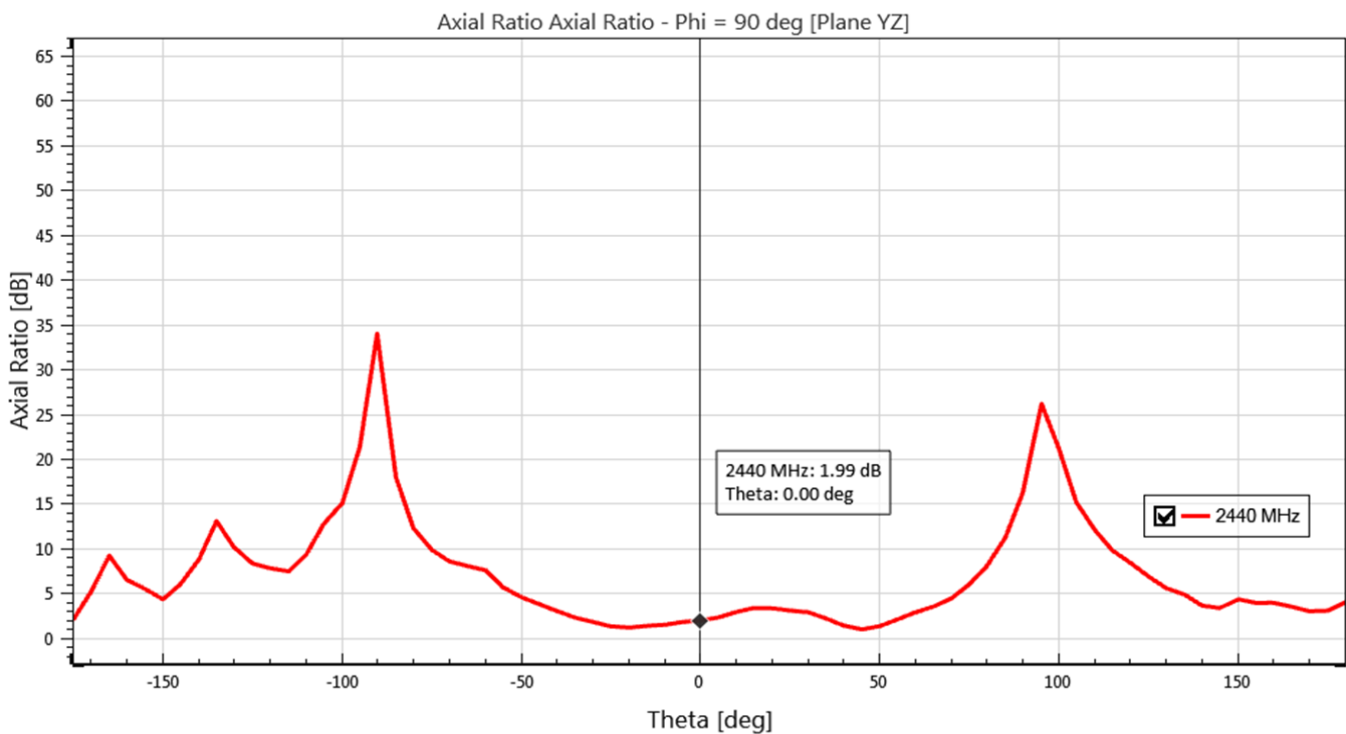
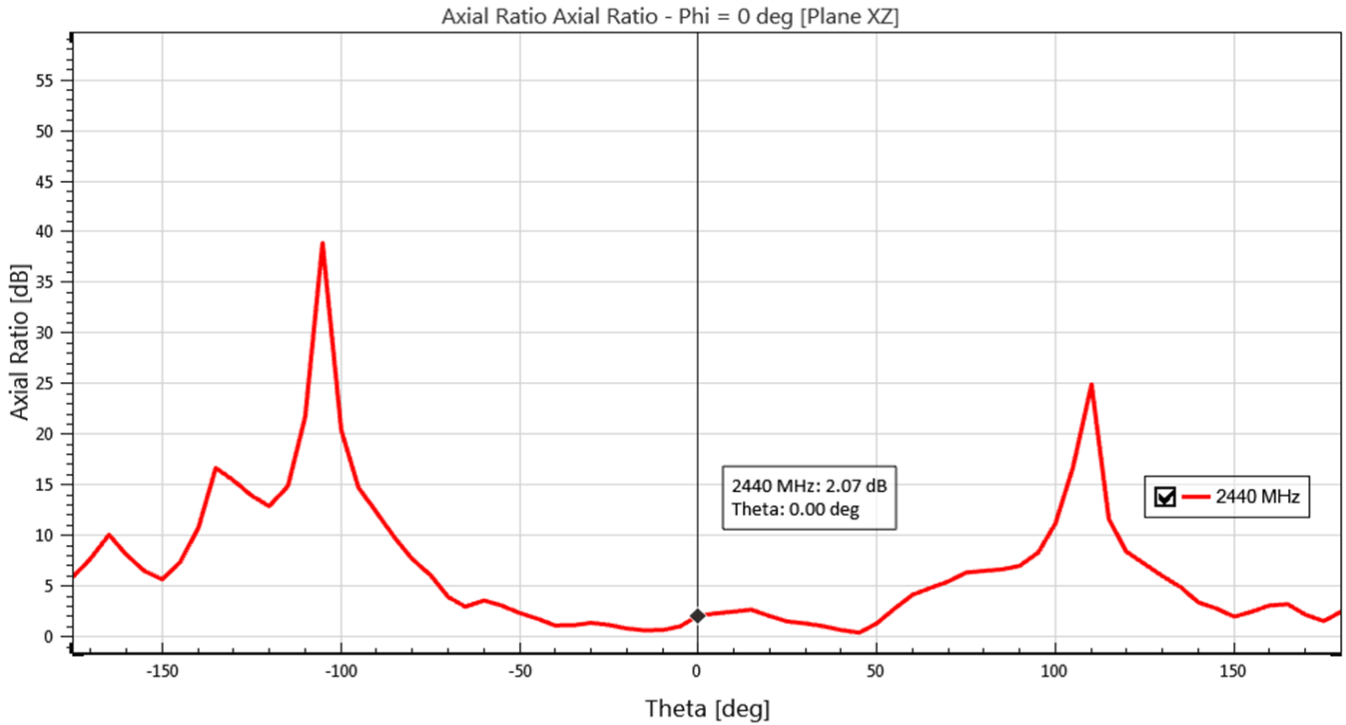
- █ 2400 MHz
- █ 2440 MHz
- █ 2480 MHz



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**Axial Ratio YZ, XZ Plots**

Typical performance in free-space.  
 Measured @ 2440 MHz

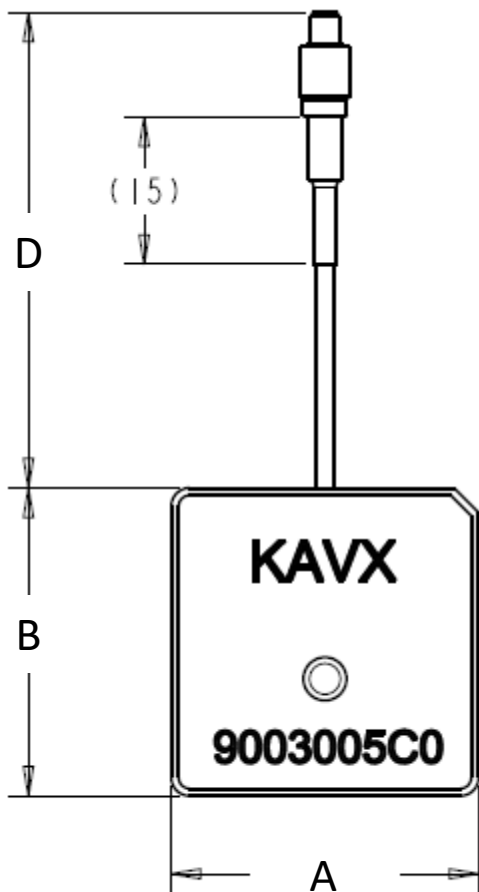


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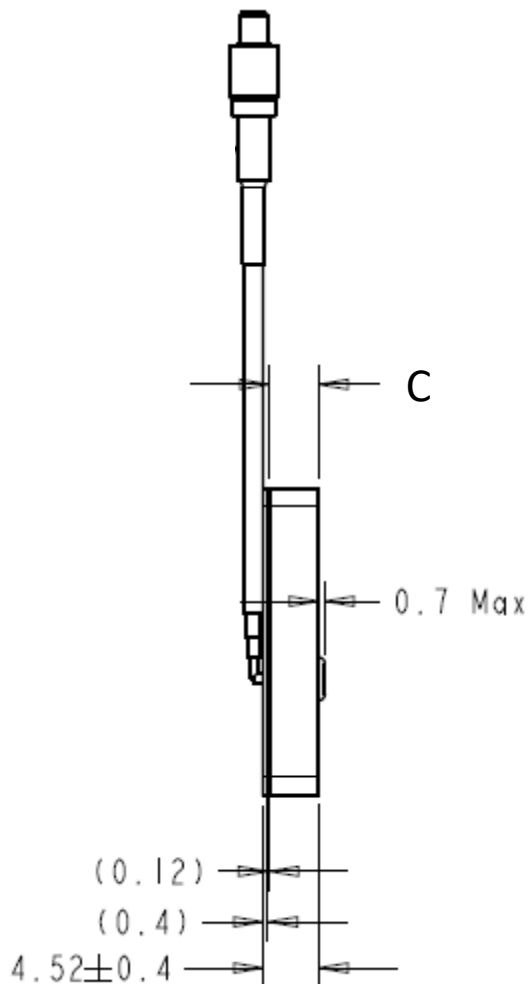
**Mechanical Dimensions**

Typical antenna dimensions, in mm.

Part Number	A	B	C	D
9003005C0-AM20L0060	25.0 ± 0.2	25.0 ± 0.2	4.0	60.0 ± 2.0



**Top View**



**Side View**