

# Part No. 9001999 SDARS Ceramic Patch Antenna

2320 – 2345 MHz

Supports: Satellite Digital Audio Radio Systems, SiriusXM, Digital high-fidelity (hi-fi) audio entertainment



KYOCERA AVX antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. This antenna is mounted using double sided adhesive and through-hole solder pin. This innovative antenna provides compelling advantages for SDARS enabled devices ideal for on roof applications.

## SDARS Ceramic Patch Antenna

2320 – 2345 MHz

### 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

- Satellite Digital Audio Radio Service (SDARS),
- Ideal for automotive applications
- Internet of Things (IoT),
- Remote technology monitoring,
- Mapping systems.

### Electrical Specifications

Typical Characteristics, on 150 x 150 mm ground plane

Frequency	SDARS 2320 – 2345 MHz	
	2330 MHz	2340 MHz
Return Loss	< -11 dB	
Zenith Gain	6.5 dBic	
Axial Ratio	< 2.8 dB	< 0.5 dB
Polarization	L.H.C.P	
Impedance	50 Ω	

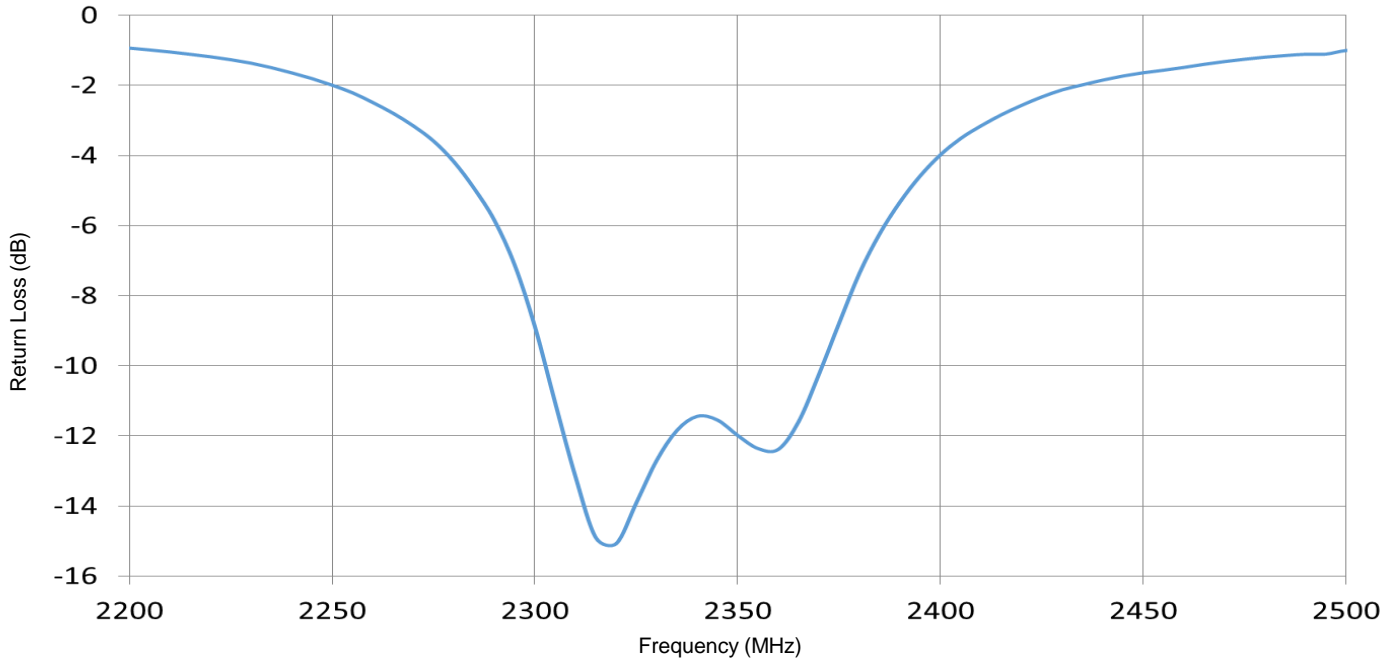
### Mechanical Specifications & Ordering Part Number

Ordering Part Number	9001999
Size (mm)	25.0 x 25.0 x 4.00
Mounting	Adhesive tape and solder pin
Weight (grams)	8.22
Packaging	Tray

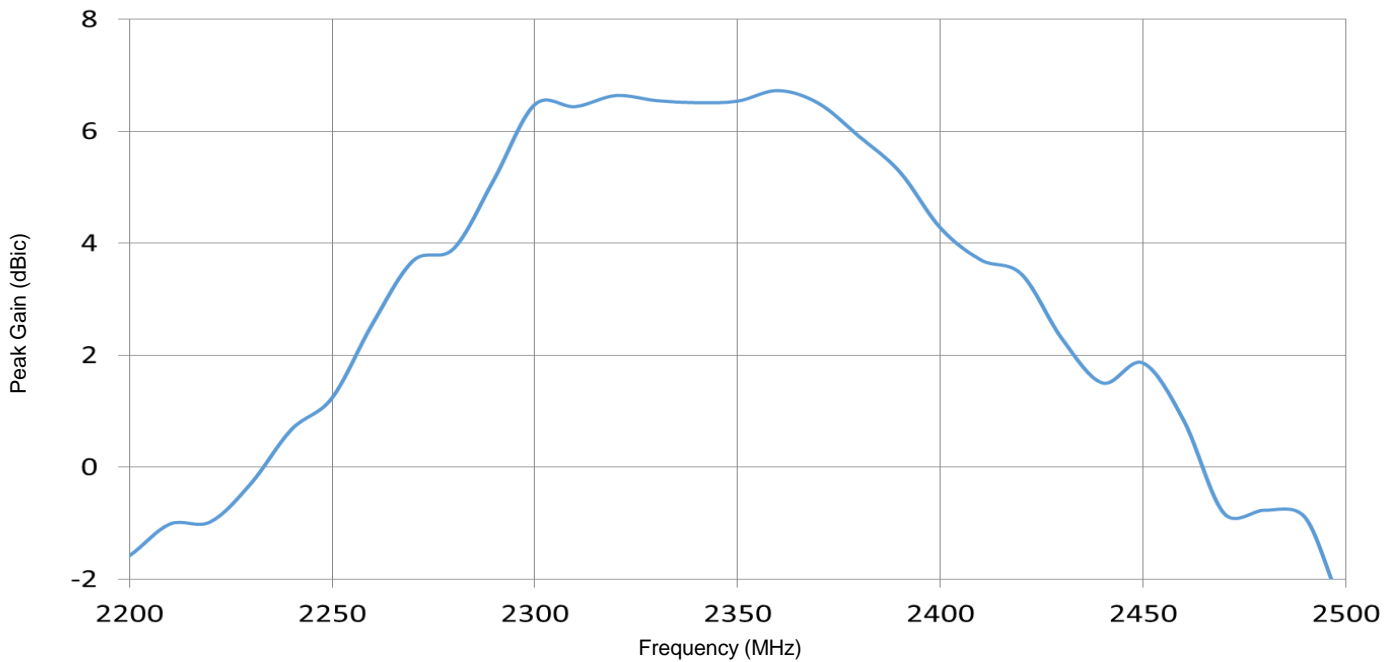
SDARS Ceramic Patch Antenna Specifications.  
 KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

**Return Loss and Peak Gain Plots**  
 Typical performance on 150 x 150 mm PCB

**Return Loss**



**Peak Gain**

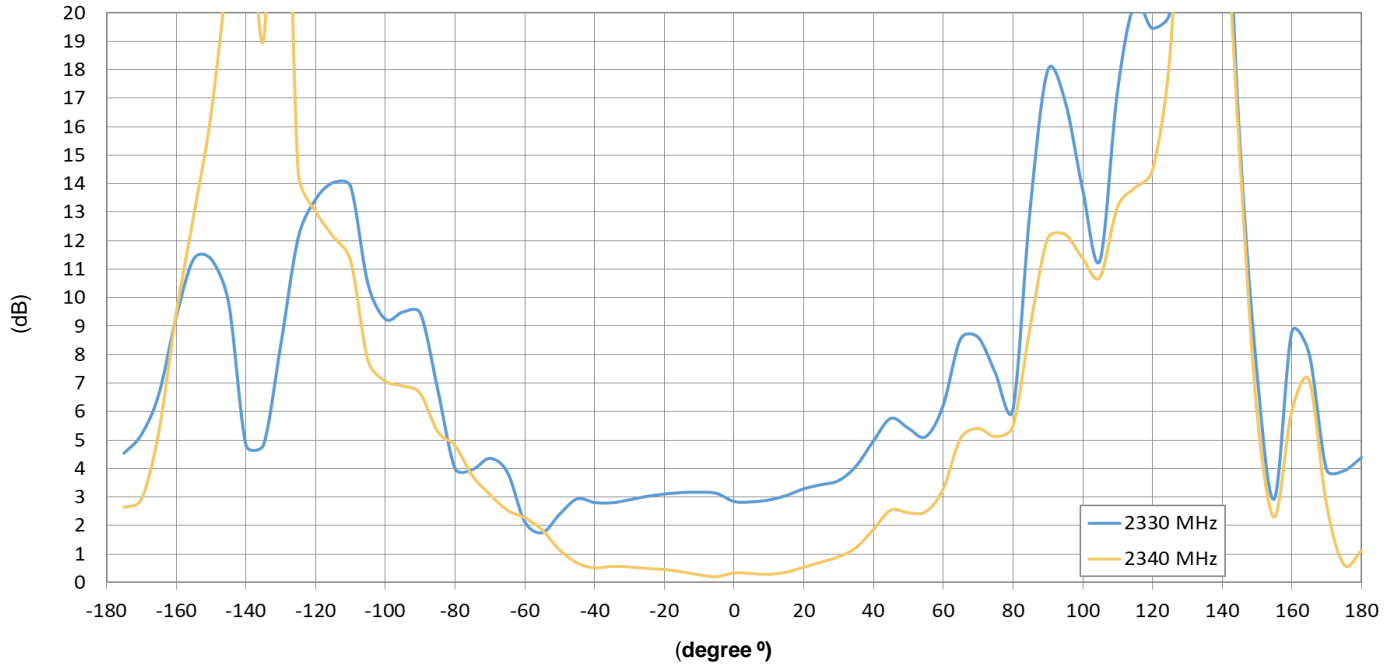


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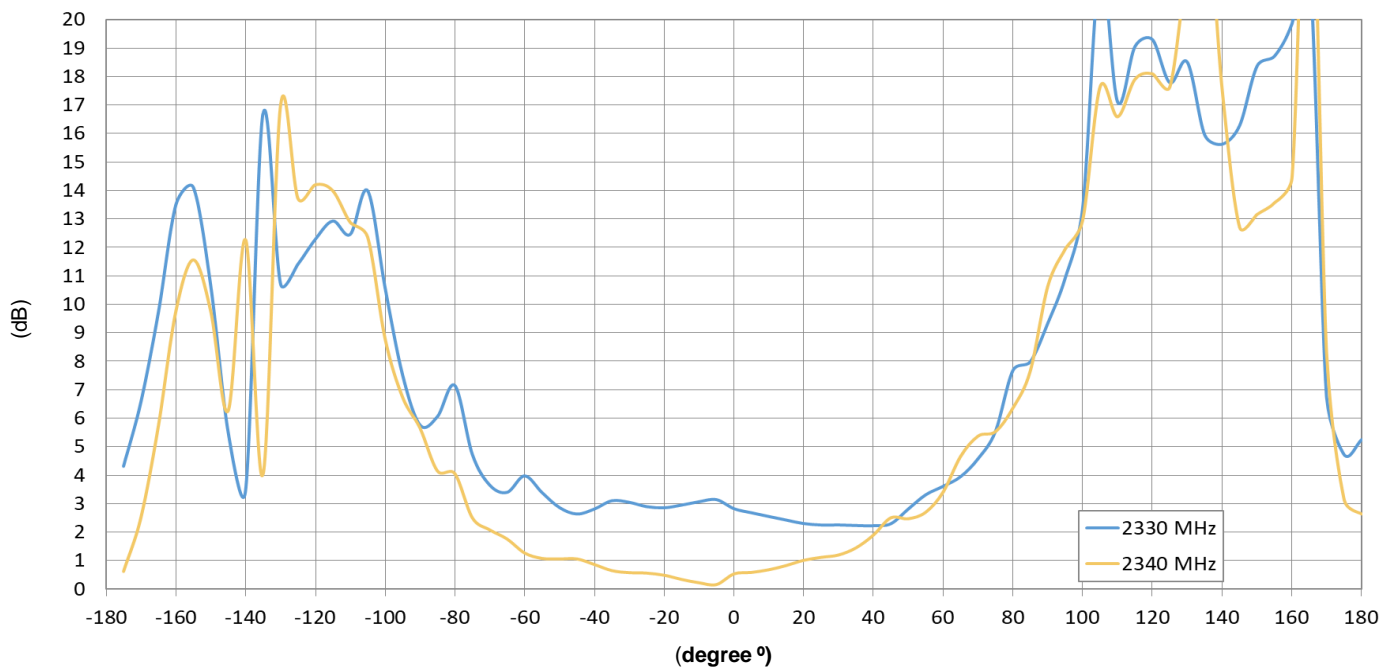
**Axial Ratio Plots**

Typical performance on 150 x 150 mm PCB

**Axial Ratio Phi = 0°**



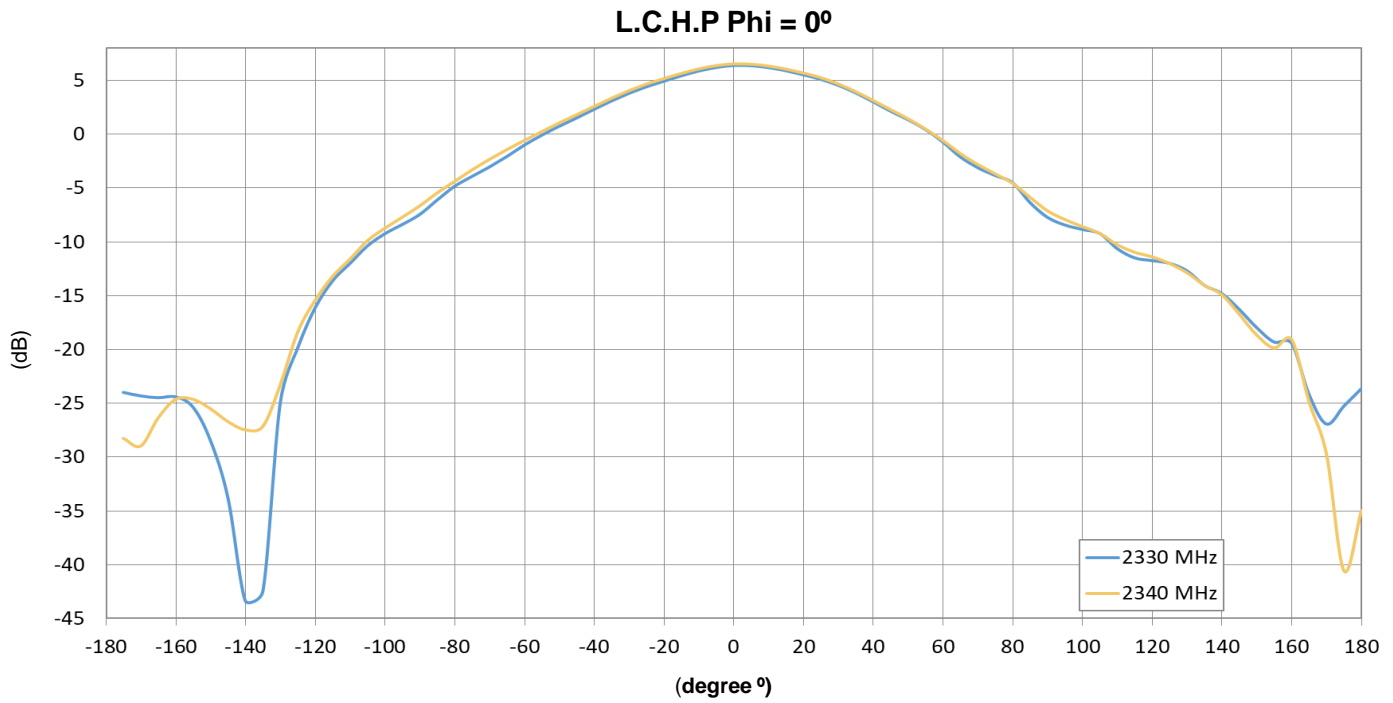
**Axial Ratio Phi = 90°**



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**L.C.H.P Plot**

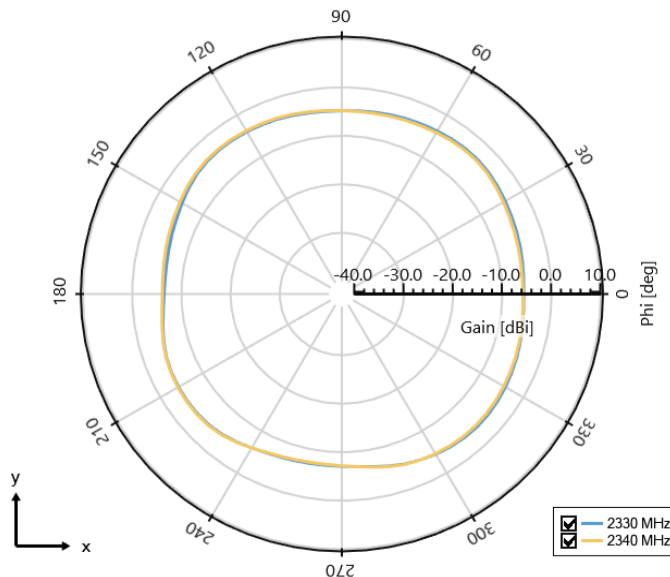
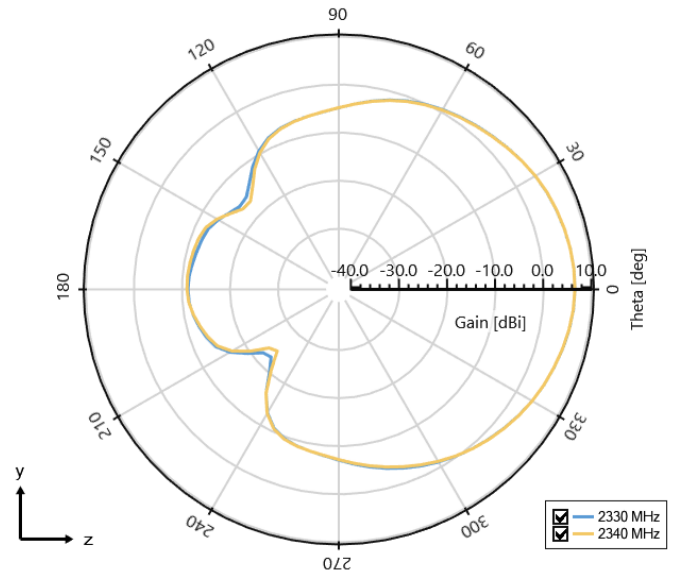
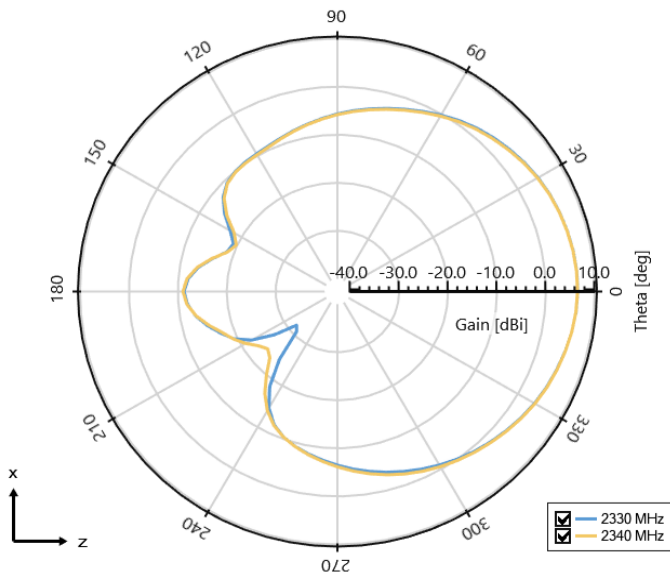
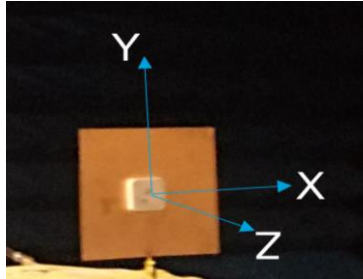
Typical performance on 150 x 150 mm PCB



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**Antenna Radiation Patterns**

Typical performance on 150 x 150 mm PCB

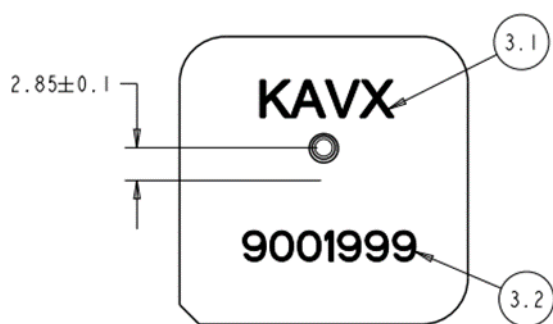


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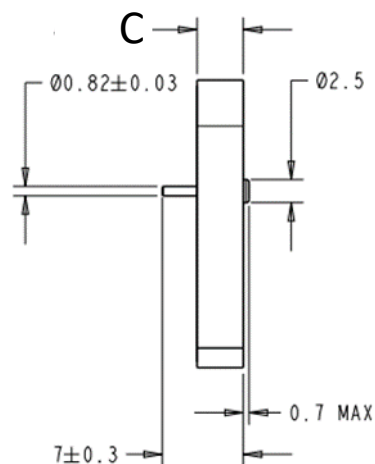
**Mechanical Dimensions**

Typical antenna dimensions (mm)

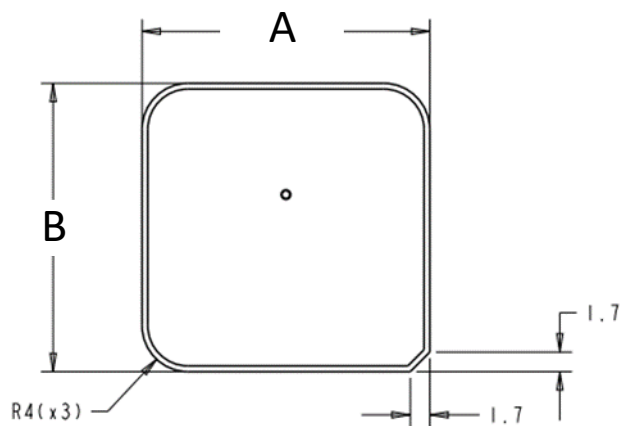
Part Number	A	B	C
9001999	25.00 ± 0.20	25.00 ± 0.20	4.00 ± 0.20



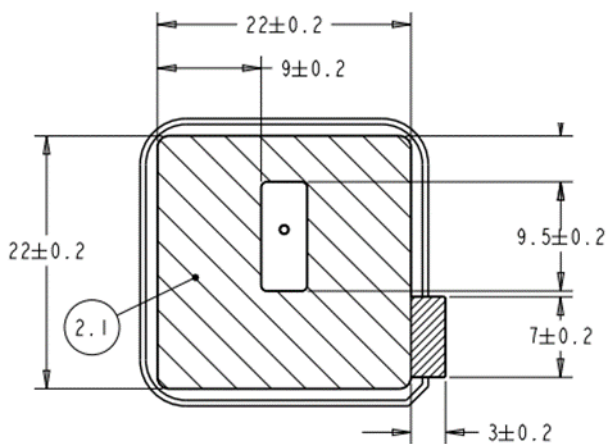
**Top View**



**Side View**



**Bottom**



**Adhesive Liner View  
(Bottom)**