Part No. 9001118

V2X Ceramic Patch Antenna

5.9 GHz DSRC Band

Supports: V2V/V2I/V2P Applications, Automotive, Vehicle Safety Applications, Intelligent Transportation System

V2X Ceramic Patch Antenna

US – Band 5850 – 5925 MHz
EU – Band 5870 – 5905 MHz

KYOCERA AVX family of ceramic patch antennas are designed to offer the best performances for a wide range of applications. The 9001118 antenna is specifically designed for Dedicated Short Range Communication systems. This high performance antenna is perfect for V2X applications to provide the high-secure and high-speed wireless communication between vehicle and Infrastructure

Global Operations & Design Support

KYOCERA AVX's global operations support an integrated network of design centers that can take projects from concept to production.

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.

Greater Flexibility with Unique Form Factors

KYOCERA AVX's technology helps you deliver more advanced ergonomic designs without adverse impact on product performance.

RoHS Compliant

Products are the latest RoHS version compliant.

APPLICATIONS

- Vehicle safety applications
- Automotive
- Connected car application
- safety driving support
- Embedded system

Electrical Specifications

Typical performance measured with 70 x 70 mm PCB

Frequency (GHZ)	5.850 – 5.925
Gain 0° xz plane	4 dB
Average Efficiency	55 %
Return Loss	< -15 dB
Polarization	R.H.C.P
Impedance	50 ohm

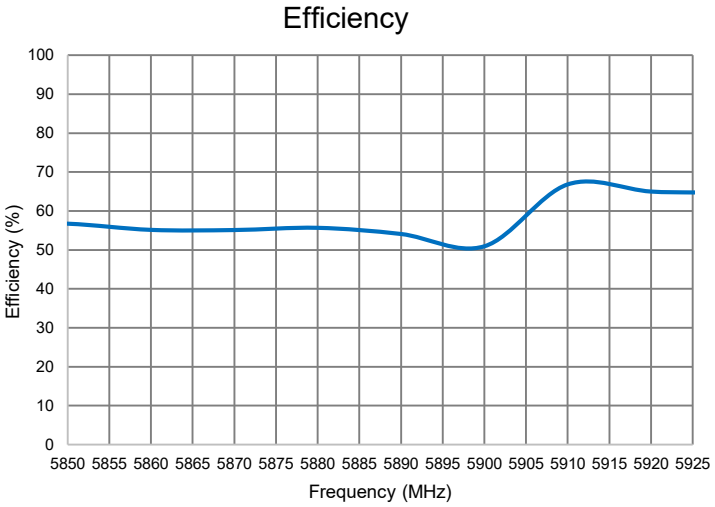
Mechanical Specifications & Ordering Part Number

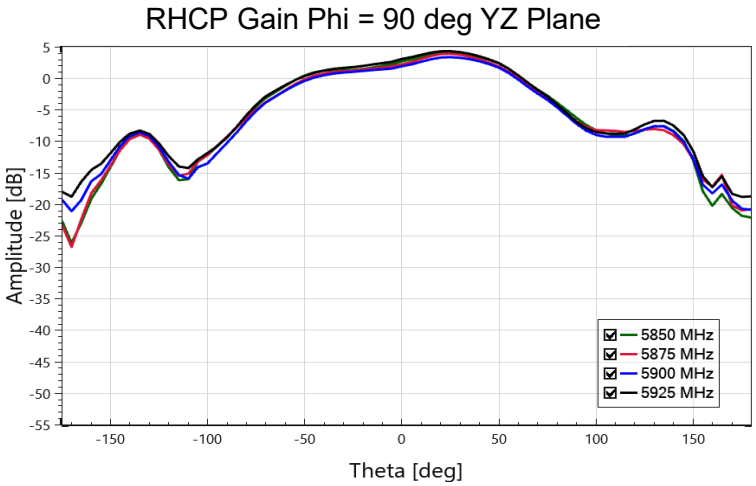
Ordering Part Number	9001118
Dimensions (mm)	13.00 ± 0.20 length 13.00 ± 0.20 width 4.00± 0.20 thickness
Mounting	Adhesive 3M (11x11x0.05) 1 trough-hole Soldered Pin
Weight (grams)	12
Operating Temperature (°C)	-40 to +70

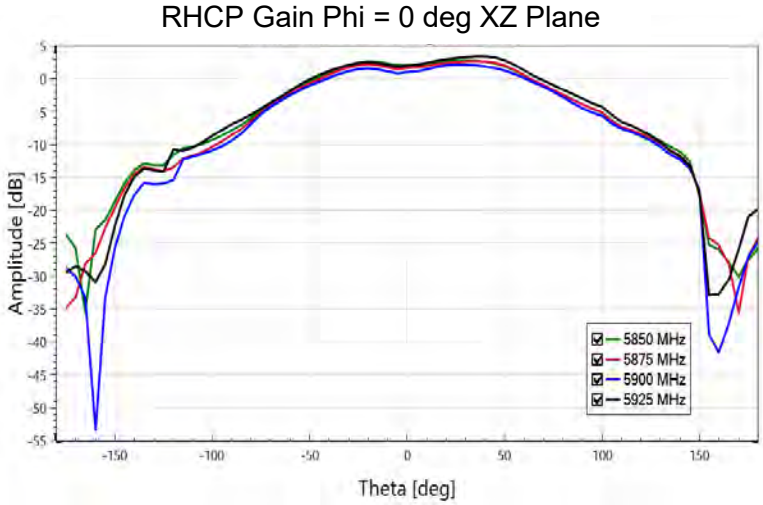
5.9 GHz DSRC Ceramic Patch Antenna Specifications
KYOCERA AVX produces a wide variety of standard and custom antennas to meet user needs

Return Loss, Efficiency ,Peak Gain and RHCP Gain Plots

Typical performance measured with 70 x 70 mm PCB







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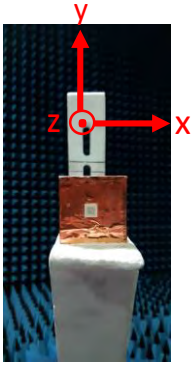
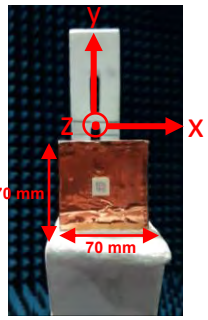
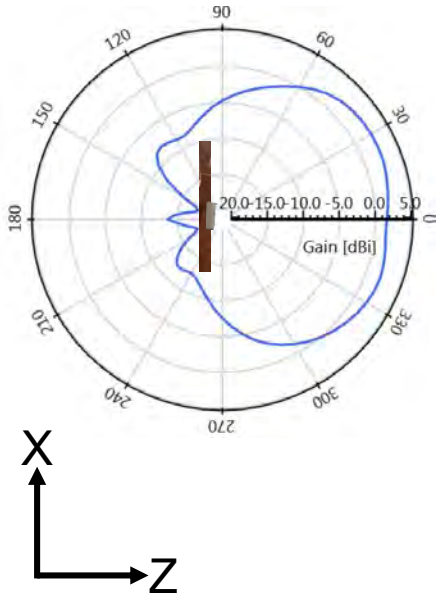
Antenna Radiation Patterns and Axial Ratio

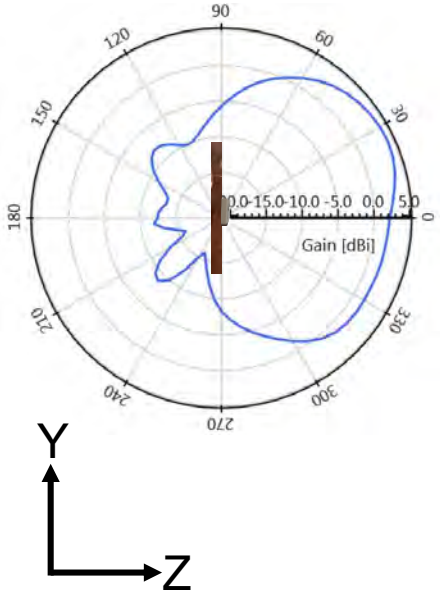
Typical performance measured with 70 x 70 mm PCB
Measured at 5870

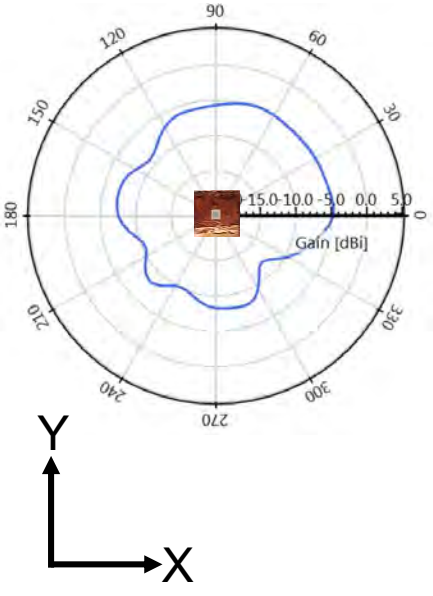




Measured at 5870 MHz



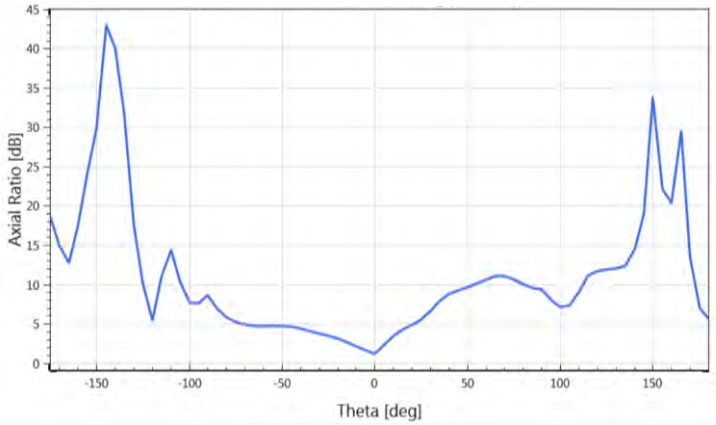




Phi=90 º

Phi=0 º

Measured at 5870 MHz



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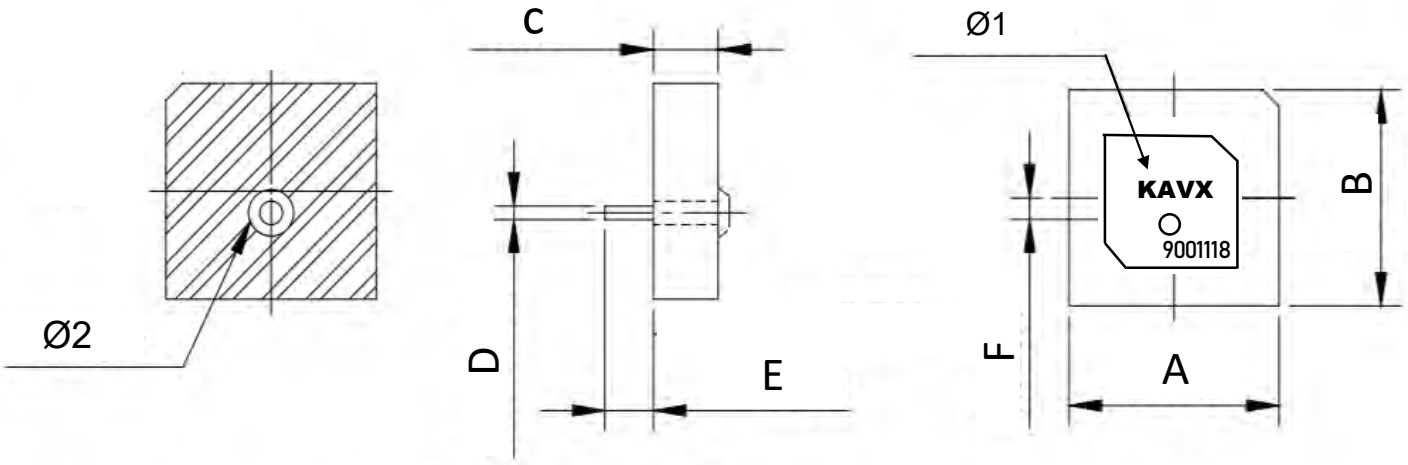
Mechanical Dimensions

Typical antenna dimensions (mm)

Part Number	A (mm)	B (mm)	C(mm)	Ø1 (mm)	D (mm)	E(mm)	F (mm)	Ø2 (mm)
9001118	13.00 ± 0.20	13.00 ± 0.20	4.00 ± 0.20	1.42 ± 0.10	0.81 ± 0.03	3.00 ± 0.30	1.30 ±0.10	2.80 ± 0.20



Bottom -View-

Top -View-

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