



DATASHEET Part No. 1002429 Product: GLONASS Ceramic Patch Antenna

Part No. 1002429 GLONASS Ceramic Patch Antenna

1.602 GHz

Supports: Tracking, Smart Home, Agriculture, Automotive, Healthcare, Digital Signage, Wearables, Industrial Devices



GLONASS Ceramic Patch Antenna

1.593 – 1.610 GHz

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. Reliability

Products are the latest RoHS version compliant.

APPLICATIONS

•	Embedded	•	Telematics
	design	•	Tracking
•	POS,	٠	Healthcare
	Headsets,	•	M2M,
	Tablets		Industrial
•	Gateway,		devices
	Access	٠	Smart Grid
	Point	٠	OBD-II
	املم مالم مرما ا		

Handheld

KYOCERA AVX antennas deliver on the key needs of device designers for higher functionality and performance in smaller/thinner designs. These innovative antennas provide compelling advantages for a GLONASS enabled handheld devices, media players and other mobile devices.

Electrical Specifications

Frequency	1.593 – 1.610 (GHz)
Efficiency	70%
Center Frequency fo	1602 ± 5.0 MHz
Return Loss	< -16 dB
Gain 0° XZ-Plane	6.50 dBic
Polarization	R.H.C.P
Impedance	50 ohm
Axial Ratio	< 3 dB

Mechanical Specifications & Ordering Part Number

Ordering Part Number	1002429
Size (mm)	25.0 x 25.0 x 4.5
Mounting (mm)	Adhesive (Nitto 5000NS 22 x 22 x 0.16) & 1 through-hole Soldered Pin
Weight (grams)	9.4
Packaging	Plastic Tray

Proprietary



VSWR, Efficiency, Peak Gain Plots

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

Typical performance on 60 x 60 mm PCB Efficiency **Return Loss** 80% 0 70% -5 60% -10 50% (gp) ssor ≳ 40% Return L j≝ 30% 20% -25 10% -30 — 1580 0% 1580 1585 1590 1605 1610 1615 1610 1615 1595 1600 1585 1590 1595 1600 1605 Freq in MHz Freq in MHz **Peak Gain** 6 5 4 3 2 (qBi) 1 Gain 0 -1 -2 -2 -3 -4 -5 1580 1615 1585 1590 1595 1600 1605 1610 Freq in MHz

Antenna Radiation Patterns

Typical performance on 60 x 60 mm PCB





GLONASS Ceramic Patch Antenna 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, in mm.

Part Number	A (mm)	B (mm)	C (mm)
1002429	25.0 ± 0.2	25.0 ± 0.2	4.5 ± 0.4
-	——————————————————————————————————————		
	ET		
	0	B	
	1002429		

<u>Top View</u>







© 2021 KYOCERA AVX