

GNSS - Automotive Grade Active External Puck Antenna



AECW0401G4Z

Request Samples



Check Inventory



Ø46.6 x 16.3 mm

RoHS/RoHS II Compliant

MSL Level = 1

Features

- Automotive Grade Antenna
- Manufactured in Automotive Certified Lines
 - IATF 16949 Certified
- PPAP Available upon Request
- GNSS/GPS/GLONASS/BeiDou/QZSS
- IP67 Rated
- RHCP
- High LNA Gain of 28 dB
- Easy Installation Using Screw
- Fully Customizable Cable and Connector Options for RF Connection

Applications

- IoT
- M2M
- Automotive Applications
- Geolocation Tracking
- Vehicle Tracking and Fleet Management
- Smart City
- Transportation
- Smart Agriculture

Product Image



12117 Bee Caves Rd, Bldg-3, Suite 200 Bee
Cave, TX 78738
Phone: 512-371-6159 | Fax: 512-351-8858
For terms and conditions of sales, please visit:
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REVISED: 12-23-25

ABRACON IS
ISO9001-2015
CERTIFIED

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Electrical Specification

Parameter		Specification			Unit
		Min	Typ	Max	
Center Frequency		1561	-	1602	MHz
VSWR		-	-	1.5	:1
Gain (Zenith)		-	-	2.0	dBic
Axial Ratio		-	-	3.0	dB
Impedance		50			Ω
Polarization		RHCP			
LNA					
Gain		26	28	30	dB
Noise Figure		-	-	1.5	dB
VSWR		-	-	2.0	
Ex-band Attenuation	@CF + 50 MHz	-	12	-	dB
	@CF – 50 MHz	-	16	-	dB
Supply Voltage (DC)		2.2	-	5	V
Current Consumption		5	-	15	mA
FILTER					
Insertion Loss		-	-	3.0	dB

Mechanical Specification

Parameter	Specification
Antenna Dimension	Ø46.6 x 16.3 mm
Radome Material	ABS
Mounting Type	Screw
RF Connector	SMA (M)
Recommended Torque for Mounting	2.5 N-m
RF Cable	RG-174
Cable Length	3 M



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Environmental Specification

Parameter	Specification
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C
Relative Humidity	Up to 95%
RoHS Compliance	Yes
PB Free	Yes
MSL	1
ESD Sensitive	Yes
Vibration	10 ~ 55 Hz with 1.5 mm amplitude 2 hrs
UL Rating	UL-HB
Ingress Protection	IP67 (excluding cable outlet)

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Ordering Information

Part Number	Description	Connector Option
AECW0401G4ZS-3000S	GNSS - Automotive Grade Active External Puck Antenna with SMA(M) connector and 3000mm cable length (Black without UV coating)	SMA(M)
AECW0401G4ZS-0150I	GNSS - Automotive Grade Active External Puck Antenna with MHF1 connector and 150mm cable length (Black without UV coating)	MHF1
AECW0401G4ZS-0200S	GNSS - Automotive Grade Active External Puck Antenna with SMA(M) connector and 200mm cable length (Black without UV coating)	SMA(M)



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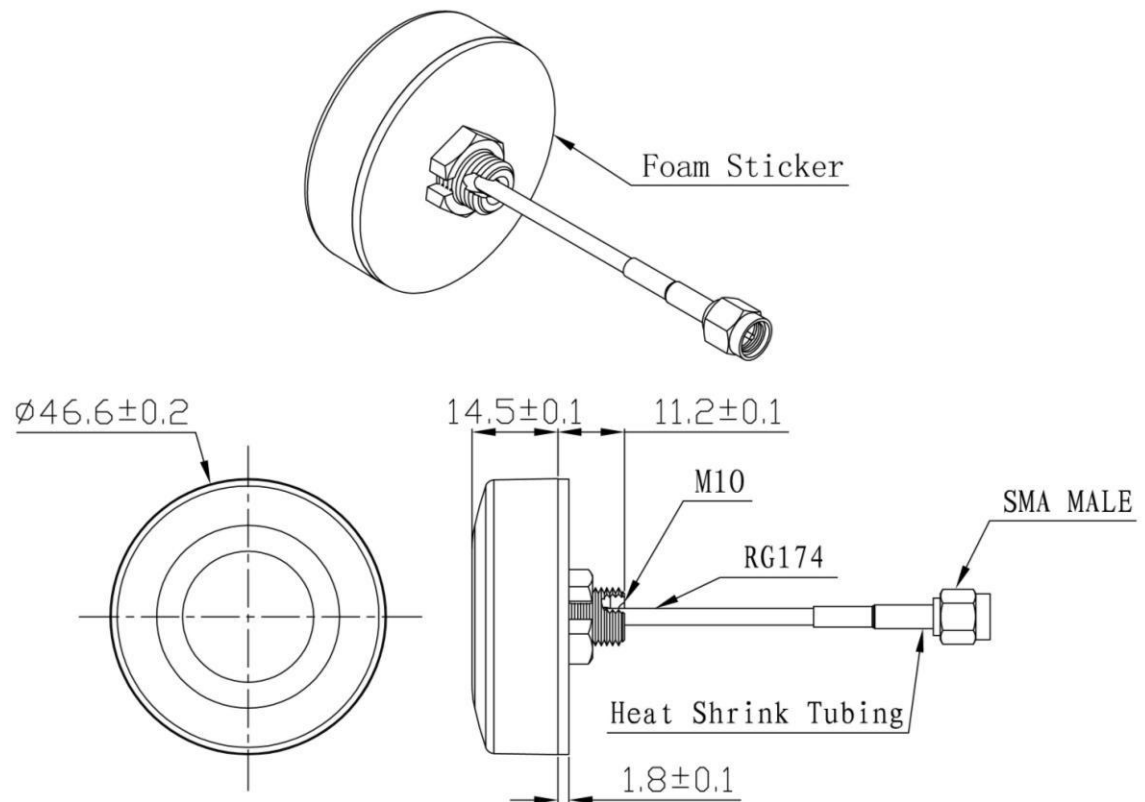


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Product Dimension



Unit: mm



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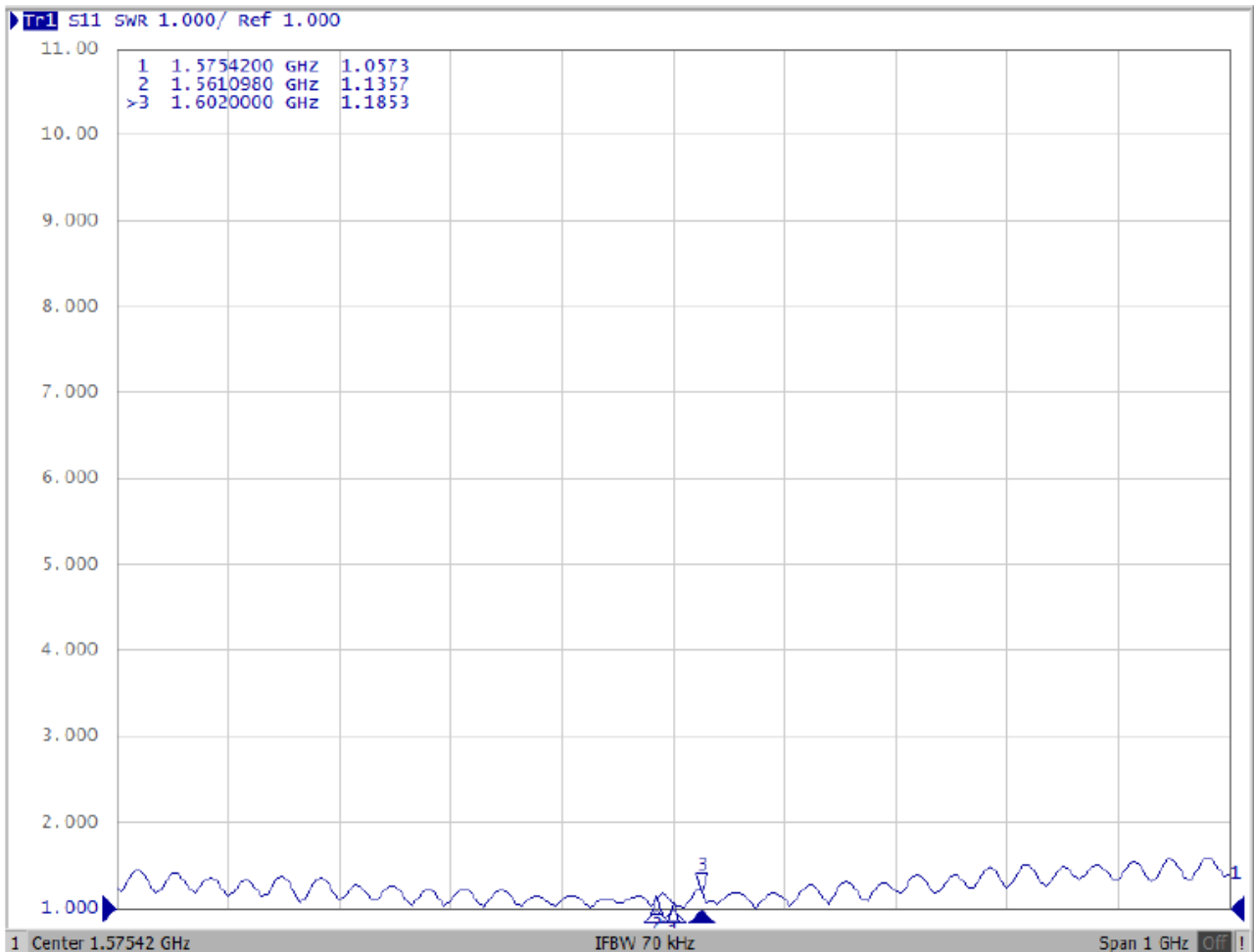


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Test Measurement - VSWR



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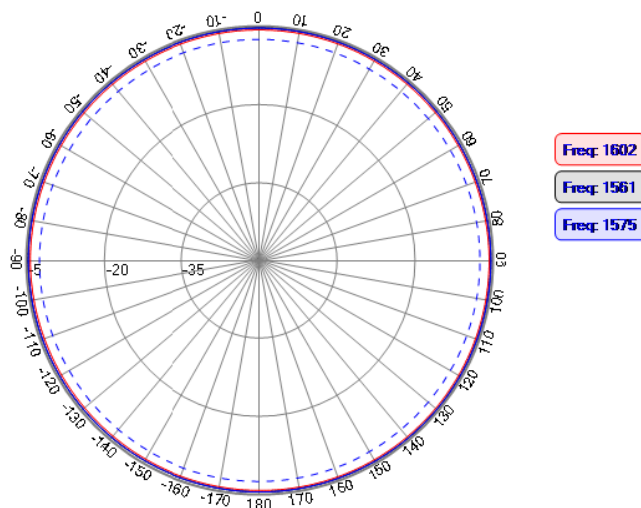
RoHS/RoHS II Compliant

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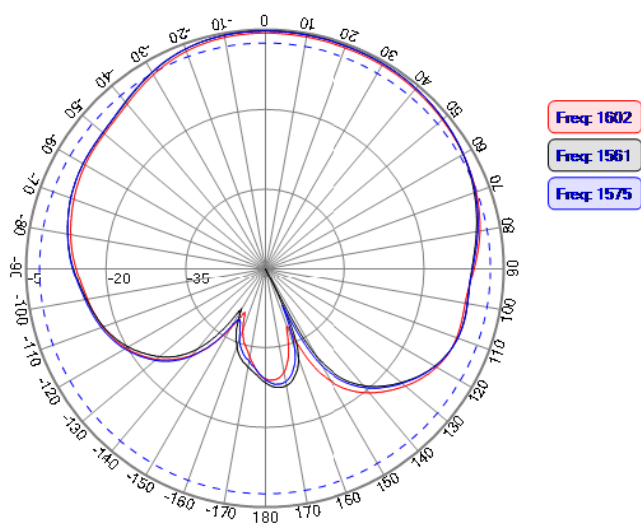
Radiation Characteristics

2D Pattern

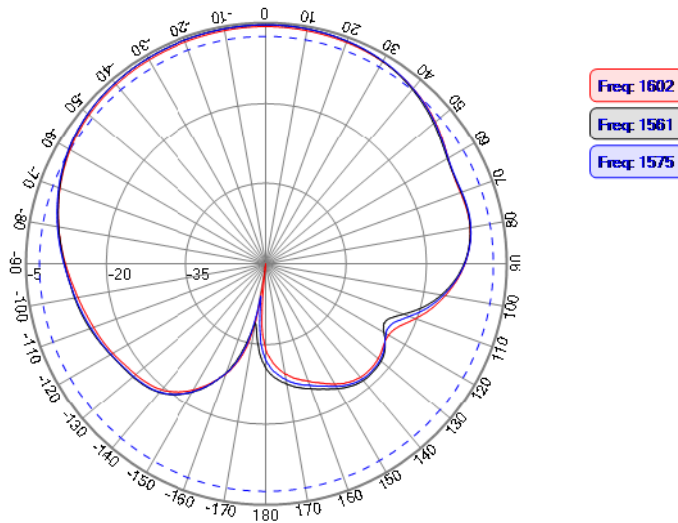
XY - Plane



XZ - Plane



YZ - Plane



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Packaging Information

Number of Antenna/ Carton: 100 pcs

Weight of 1 pc of the antenna: 100 g

Dimension of the Carton: 490 x 230 x 270 mm

Weight of the Carton: 11 kg

ATTENTION: Abracon LLC's products are Commercial-Off-The-Shelf ('COTS'), which are designed, intended, and validated for use in commercial, industrial, and automotive applications. The customer is responsible for testing and verifying the performance of an Abracon solution to meet their system-level requirements.



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