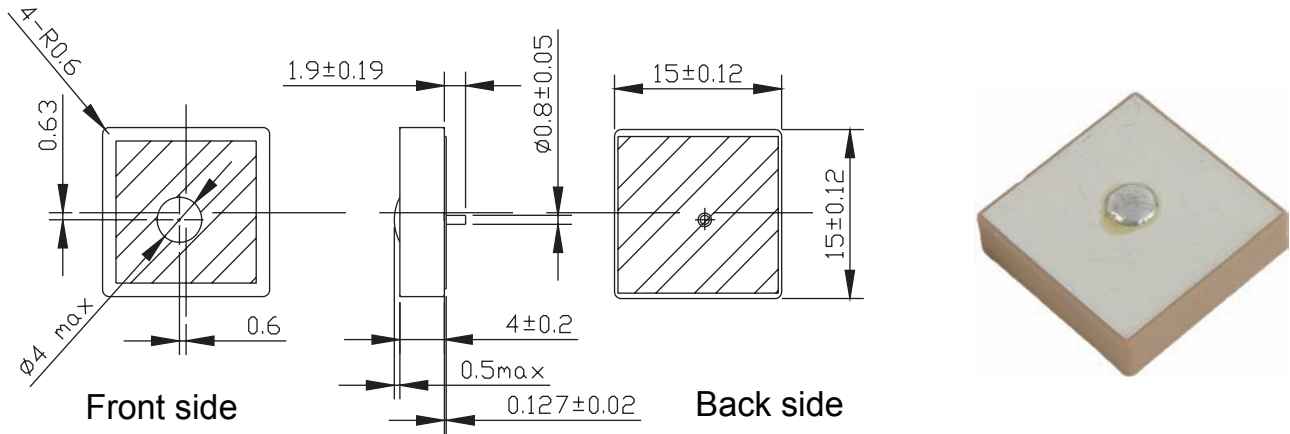


AQ005 GPS Patch Antenna

Passive Ceramic GPS Patch Antenna 15 x 15 x 4 mm

Product No. AQ00553GPS000

Dimensions (unit: mm)



Application

- Navigation systems or position tracking systems.
- Hand-held devices when GPS function is needed, e.g., Bluetooth GPS Receiver, Smart phone, Personal Digital Assistant (PDA), Portable Navigation Device (PND).

Features

- Stable and reliable in performances
- Low temperature coefficient of frequency
- Compact size
- RoHS compliance

Electrical Specification

Patch

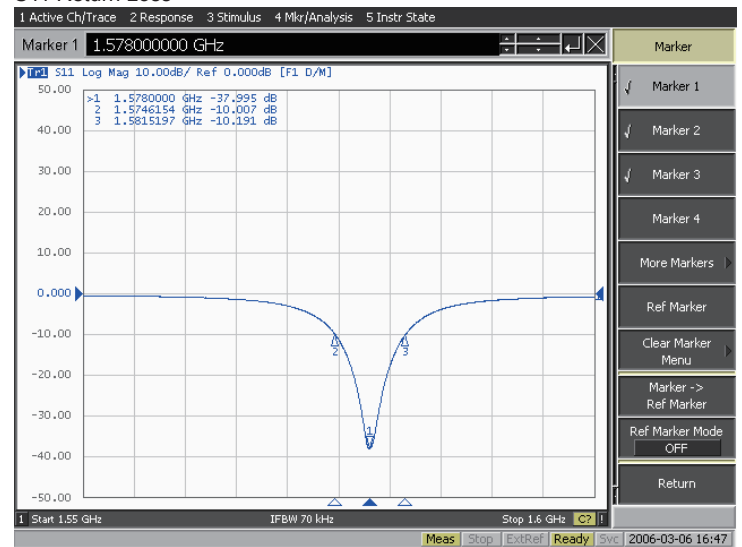
Outline Dimensions	15 × 15 × 4 mm
Ground Plane	30 x 30 mm
Center Frequency*	1578 ± 2 MHz
Bandwidth (10dB return loss)	5 MHz Min.
VSWR	1.5 Max.
Impedance	50 Ω
Polarization	R.H.C.P
Gain at Zenith	0.5 dBic typ.
Gain at 10° elevation	-5.5 dBic typ.
Axial Ratio	3 dB typ.
Temperature Coefficient of Frequency	0 ± 20 ppm/°C Max. (at -20 ~ 80 °C)

Center frequency will be offset to working frequency according to the conditions of user's ground plane and radome.

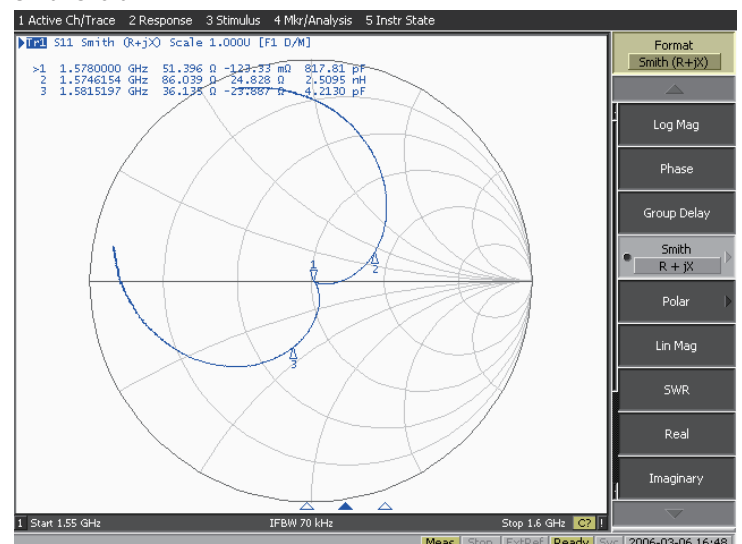
Test Report

Ground Plane in 50 x 50 mm

S11 Return Loss



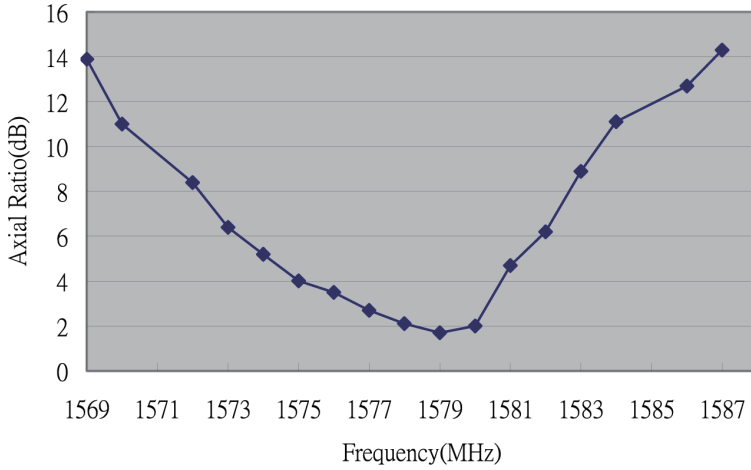
Smith Chart



Test Report

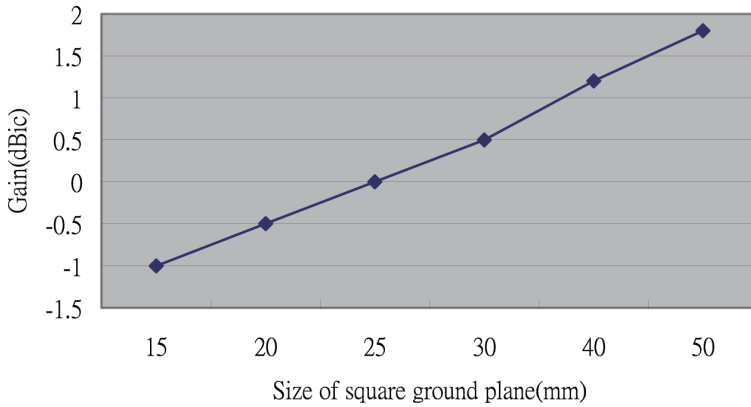
Ground Plane in 50 x 50 mm

Axial Ratio

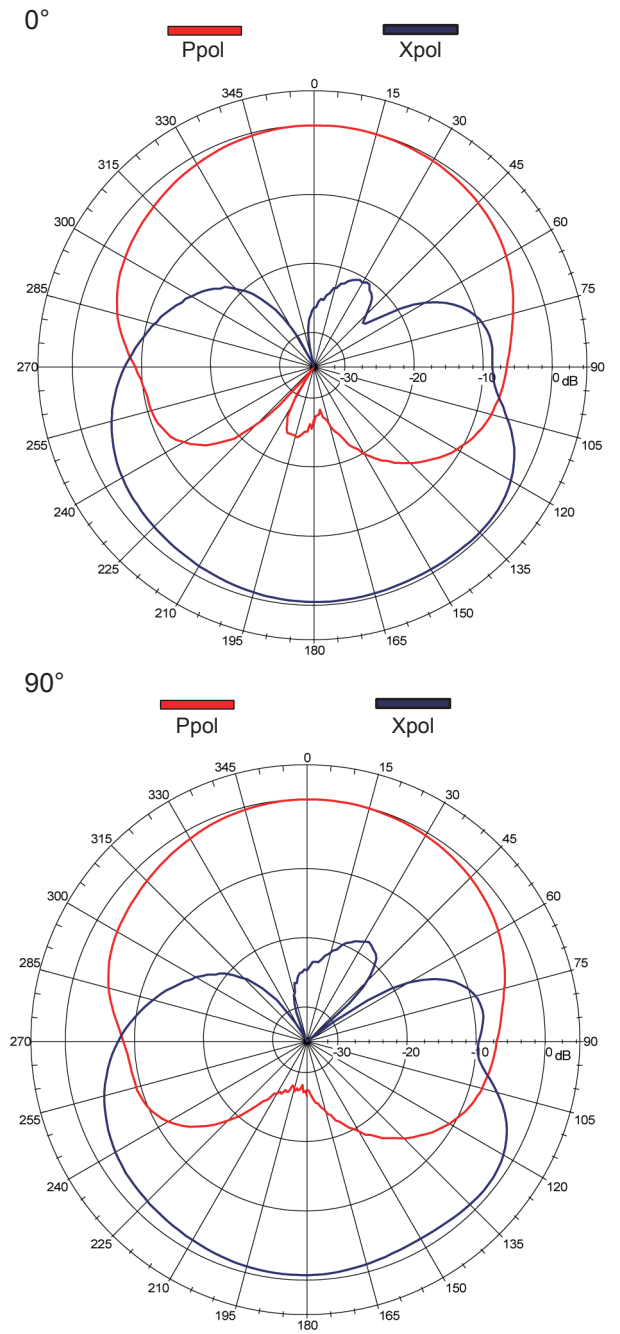


Gain vs. Ground Plane Size

Frequency: 1578MHz



Radiation Pattern



Right hand circular polarized signal $f_0=1578\text{MHz}$