

GPP 2020

GPS Antenna for 1575MHz Wireless Communication

(Advance Information)

PGS Antenna

Features

- Miniaturized size 20.0(L)X20.0(W)X3.8(H)
- Light weight and low profile
- R.H.C.P

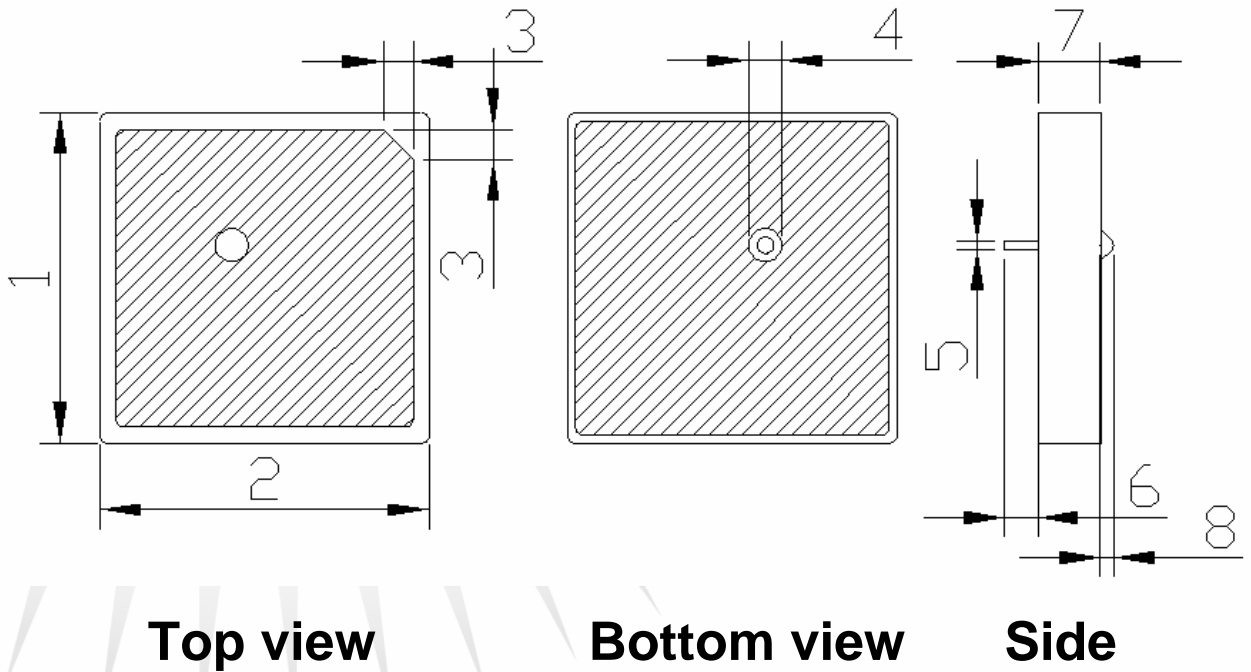
Applications

- 1575MHz wireless communications
- GPS

Specifications

Center frequency	1575MHz
Peak gain	3dBi
Operation temperature	-40 ~ +85 °C
Storage temperature	-40 ~ +100 °C
VSWR	1.5 (Max)
Input Impedance	50 Ohm
Power handling	3W (Max)
Bandwidth	9MHz
Azimuth beamwidth	R.H.C.P
Polarization	Omnidirectional in Azimuth Hemispherical in elevation

Dimensions



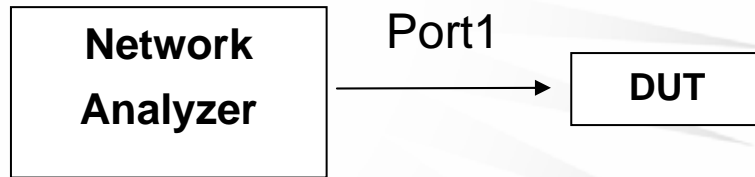
Top view

Bottom view

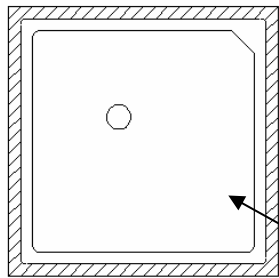
Side

Symbol	Dimensions (mm)	Symbol	Dimensions (mm)
1	20(±0.1)	5	1 (±0.02)
2	20(±0.1)	6	2 (±0.02)
3	2 (±0.02)	7	3.8 (±0.02)
4	2 (±0.02)	8	1 (±0.02)

Testing Block



Recommend Test Board Pattern



Board thickness 0.6mm
Board material:FR4

Antenna element

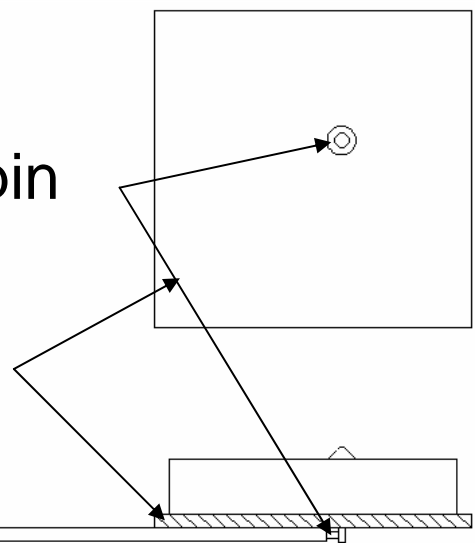


Socket pin

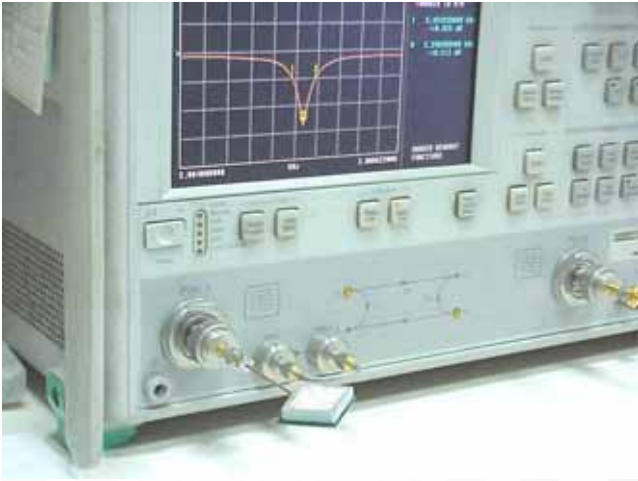
Test board (thickness 0.6mm ; material FR4)

SMA connector

coaxial cable



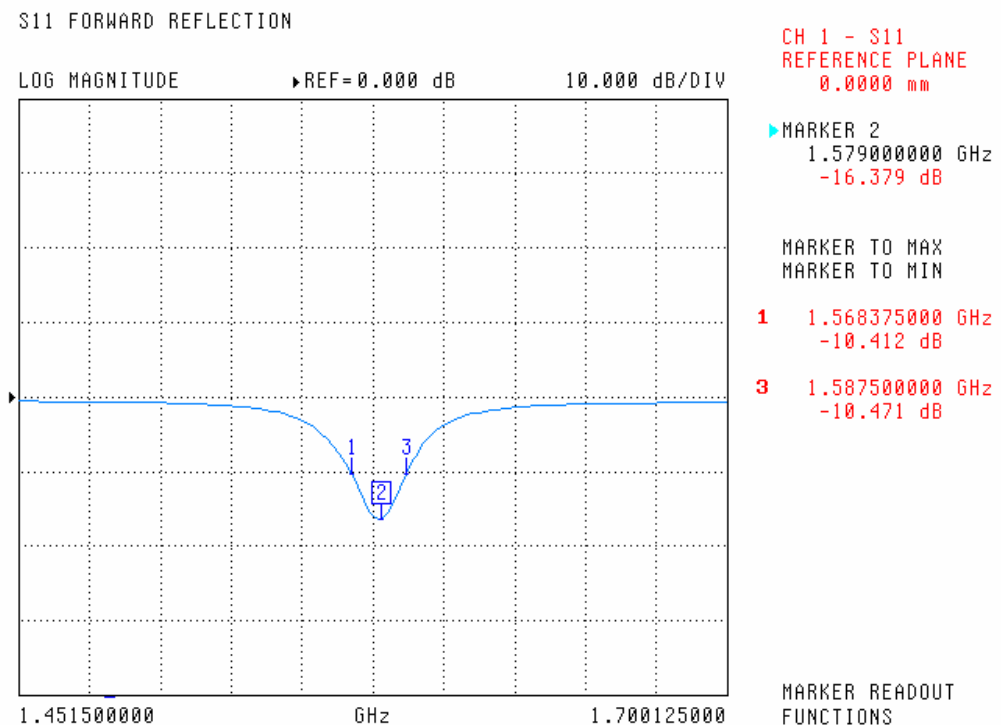
Measurement



Testing Instrument: Anritsu 37369C VNA(Vector Network Analyzer)

VNA calibrate with 1 path reflection only calibration sequence on test board feed point. The test board layout as recommend dimension.

Measured Antenna patterns Return loss



Solder the temp picture of pad

