



Specification

# SPECIFICATION

Part No. : GP-1575-12-4-A-14

Specification No : 9118C011575I50004 (AA015)

Product Name : **12mm\*12mm\*4mm GPS Patch Antenna**

Features : ROHS Compliant



## REVISION STATUS

Version	Date	Page	Revision Description	Prepared	Approved
01	Apr 06 <sup>th</sup> 2007	All	New release	TW Product Centre	Ronan Quinlan



## 1.0 Introduction

This miniaturized ceramic GPS patch antenna is based on smart **XtremeGain™** technology. It is mounted via pin and double-sided adhesive.

## 2.0 Key Antenna Performance Indicators

Original Patch Specification tested in custom housing and ground plane

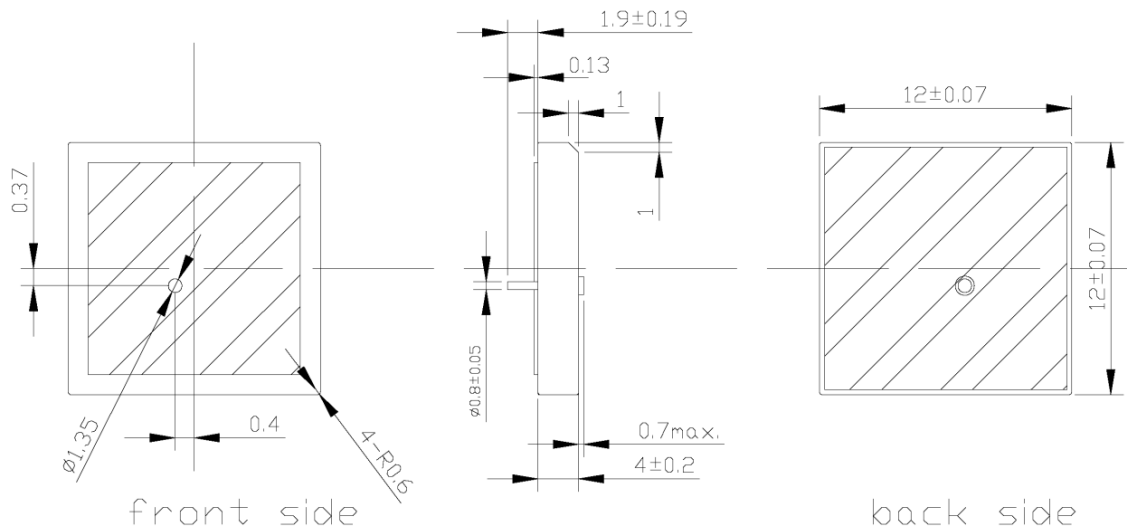
No	Parameter	Specification	
1	Range of Receiving Frequency	1575.42MHz +/- 1.023MHz	
2	Center Frequency	1575MHz ± 2 MHz when tested in custom housing and ground plane	
3	Bandwidth	7 MHz min Return Loss <-10dB	
4	VSWR	1.5 max	Center Frequency
5	Peak Gain	-1.7 dBiC typ	
7	Polarization	Right Hand Circular Polarization	
8	Impedance	50 Ohms	
9	Frequency Temperature Coefficient ( $\tau_f$ )	0 ± 20ppm/C	-20°C to +80°C
10	Operating Temperature	-40°C to +105°C	
11	Electrode Plating Adhesion	>4	



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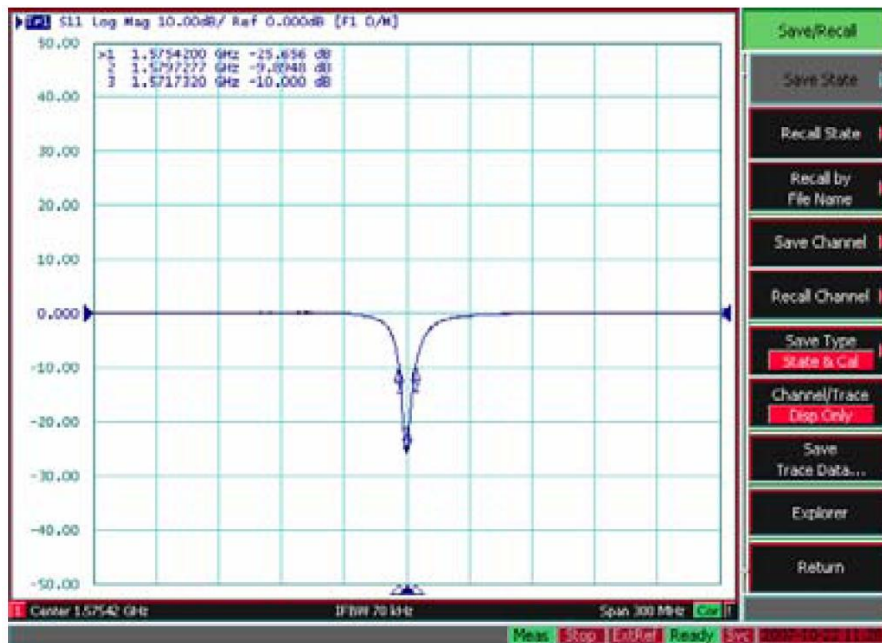
### 3.0 Mechanical Specifications

#### I. Dimensions and Drawing



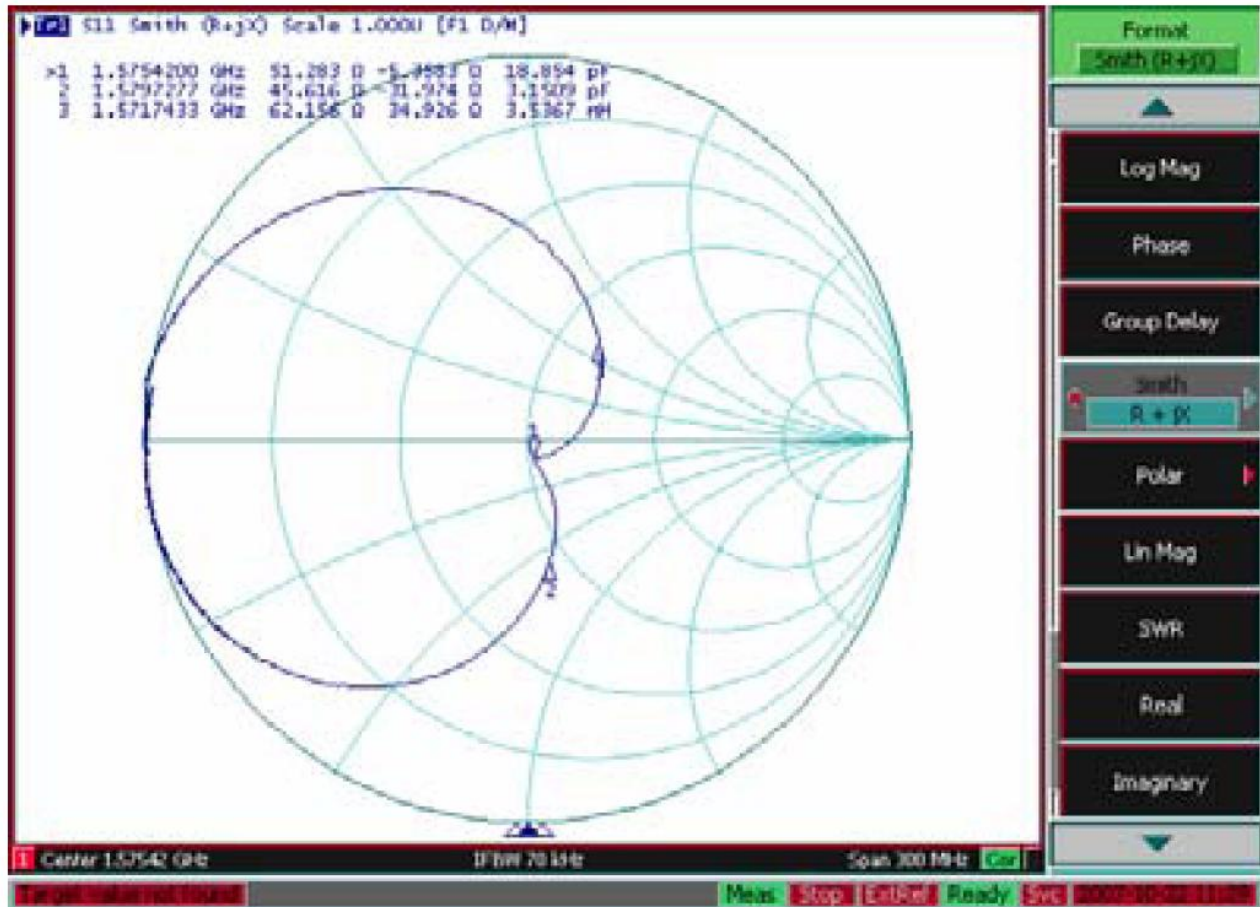
### 4.0 Electrical Specifications

#### I. S11 Return Loss





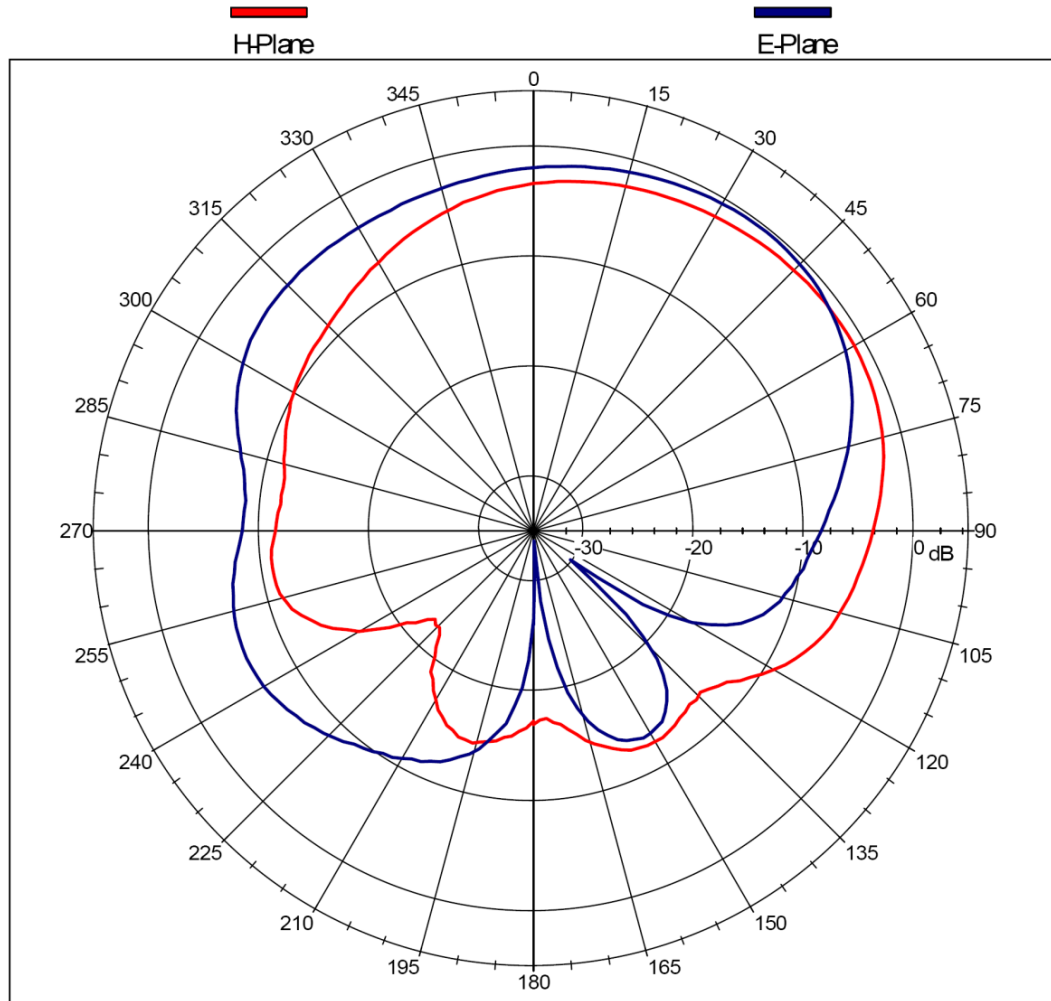
## II. Smith Chart





### III. Radiation Pattern (under custom housing and ground plane))

Far-field amplitude of AA015-H.nsi



Right hand circular polarized signal  $f_0=1575.42\text{MHz}$