

# **SPECIFICATION**

Part No. : **GP.1575.18.4.A.02** 

Specification No : DA1574P

Product Name : Miniature GPS Patch Antenna

Features : 18mm\*18mm\*4mm

**ROHS Compliant** 

.



#### **REVISION STATUS**

Version	Date	Page	Revision Description	Prepared	Approved
01	Jan 03 <sup>rd</sup> 2007	All	New format	TW Product Centre	Ronan Quinlan



#### 1.0 Introduction

This ceramic GPS patch antenna is based on smart *XtremeGain*™ technology. It is mounted via pin and double-sided adhesive and has been selected as optimal solution for the 50x50mm ground plane.

### 2.0 Key Antenna Performance Indicators

#### Original Patch Specification tested on 50mm<sup>2</sup> ground plane

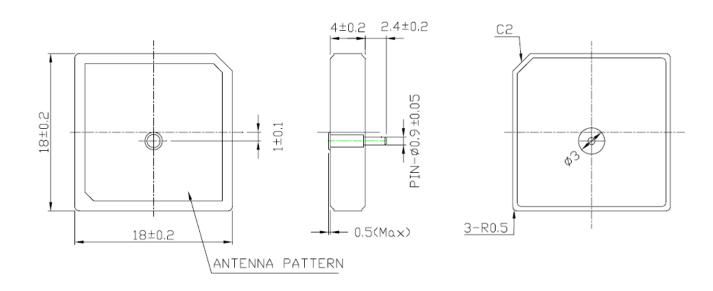
No	Parameter	Specification		
1	Center Frequency	1575MHz +/- 3MHz**		
2	Impedance	50Ω		
3	Bandwidth	8MHz min Return Loss <-10dB		
4	VSWR	1.5 max		
5	Gain toward Zenith	+2.5 dBic typ.		
6	Gain at 10°Elevation	-4.5 dBic typ.		
7	Axial Ratio	3dB Max.	Center Frequency	
8	Polarization	Right Hand Circular Polarization		
	Frequency Temperature			
9	Coefficient $(\tau f)$	0 ± 20ppm/°C		
10	Operating Temperature	-40ºC to +85ºC		

<sup>\*\*</sup>Changes in user groundplane and environment will offset centre frequency

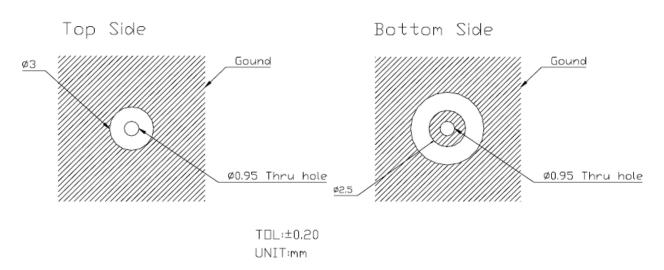


### 3.0 Mechanical Specifications

#### 3.1 Dimensions and Drawing

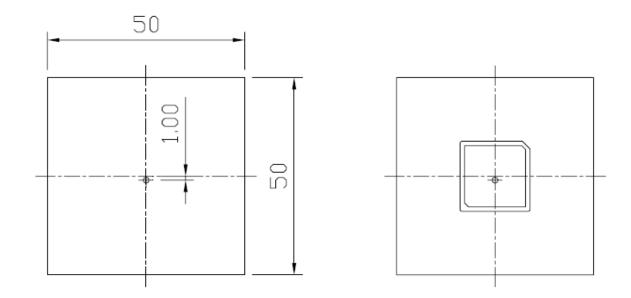


### 3.2 Layout Dimensions

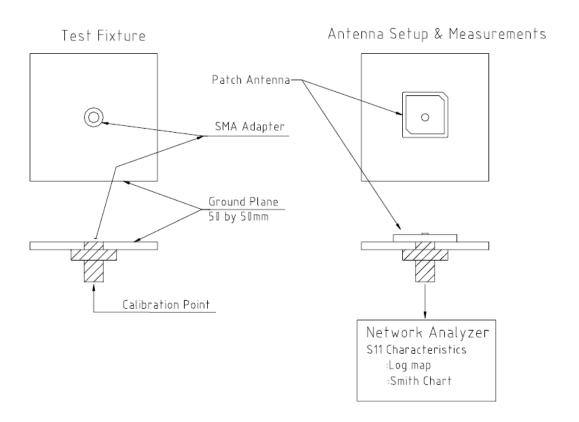




### 3.3 Test Jig and Dimensions



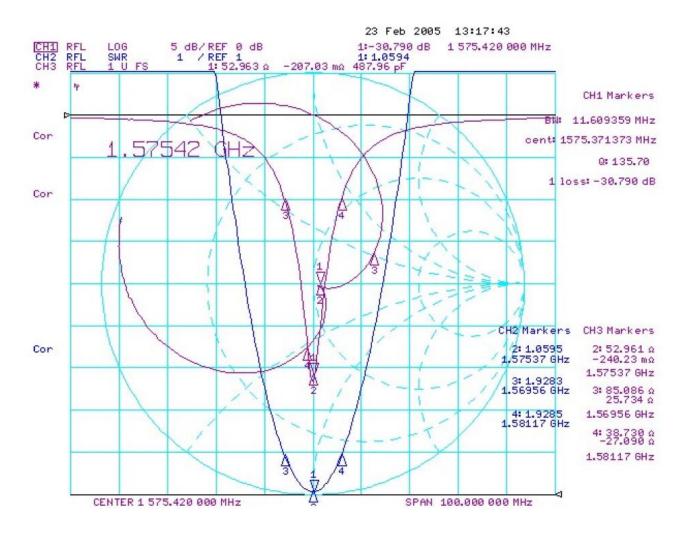
#### 3.4 Test Fixture Antenna Setup & Measurements





#### 4.0 Electrical characteristics on 50 x 50 mm GP

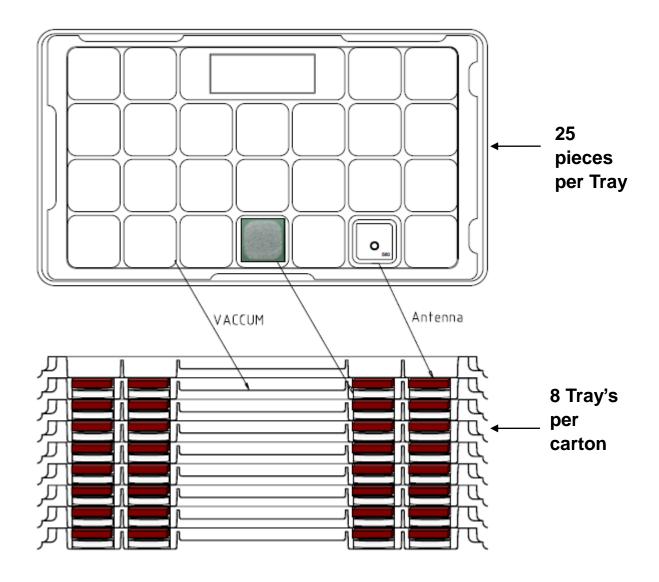
#### **Return Loss**





## 5.0 Packaging

- Per Tray: 25 pieces
- Per Carton(Inside Box) 8 Trays = 200 pieces
- Outer Carton (Outside Box)– 4 Cartons = 800 pieces





#### **Packing**

