



Specification

# SPECIFICATION

Model No. : **SGP-18a**

Part No. : **SGP-1575-18-4-A-02**

Specification No : **SP03AB15751-0010**

Product Name : **GPS SMT Patch Antenna**

Features : 18mm\*18mm\*4mm  
1575MHz Centre Frequency

**RoHS** ✓

Photo :



## REVISION STATUS

Version	Date	Page	Revision Description	Prepared	Approved
01	17 <sup>th</sup> July 2008	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 SMT process and has been selected as optimal solution for the 35\*35mm ground plane.

## 2.0 Key Antenna Performance Indicators

### Original Patch Specification tested on 35mm ground plane

No	Parameter	Specification	
1	Range of Receiving Frequency	1575MHz +/- 1.023MHz	
2	Center Frequency**	1575MHz ± 3MHz when tested on a 35m <sup>2</sup> Ground Plane	
3	Bandwidth	6 MHz min with Return Loss <-10dB	
4	VSWR	1.5 max	
5	Gain at Zenith	+1.0 dBic typ.	
6	Impedance	50 Ω	
7	Axial Ratio	4.0 dB max	
8	Polarization	Right Hand Circular Polarization	
9	Frequency Temperature Coefficient	0 ± 20 ppm/ °C max	@ -40°C to +105°C
10	Operating Temperature	-40°C to +105°C	

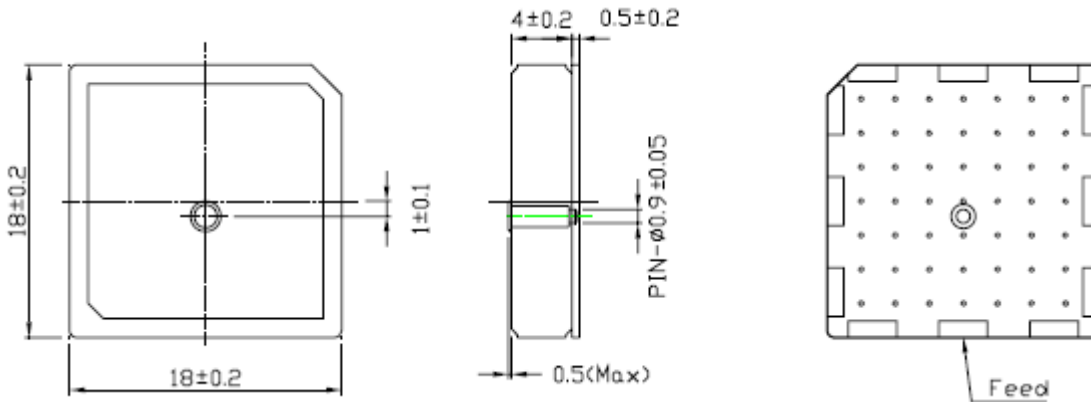
**\*\*Changes in user groundplane and environment will offset centre frequency**



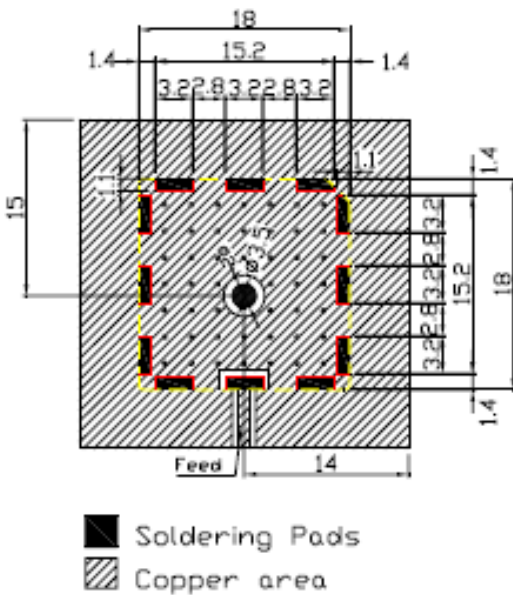
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### 3.0 Mechanical Specifications

#### 3.1 Dimensions and Drawing



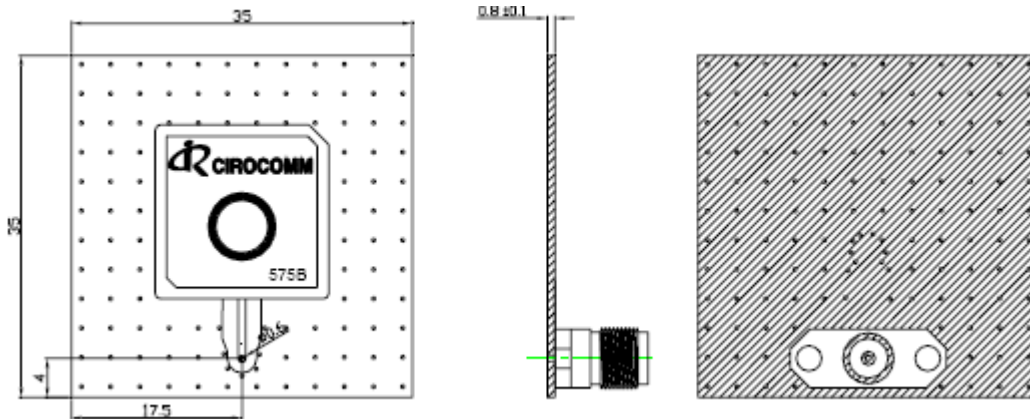
#### 3.2 Antenna footprint



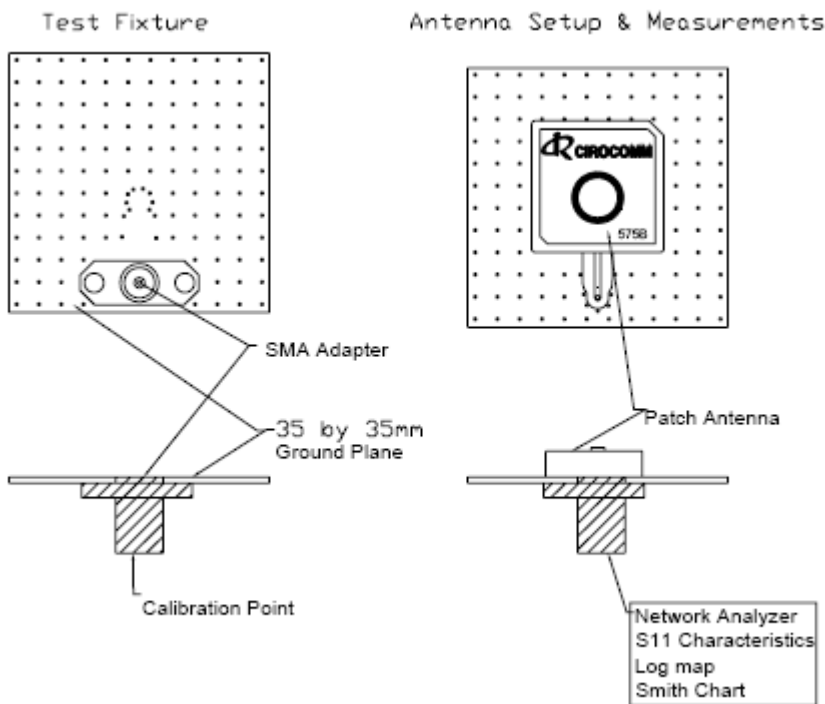


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### 3.3 Test Jig and Dimension

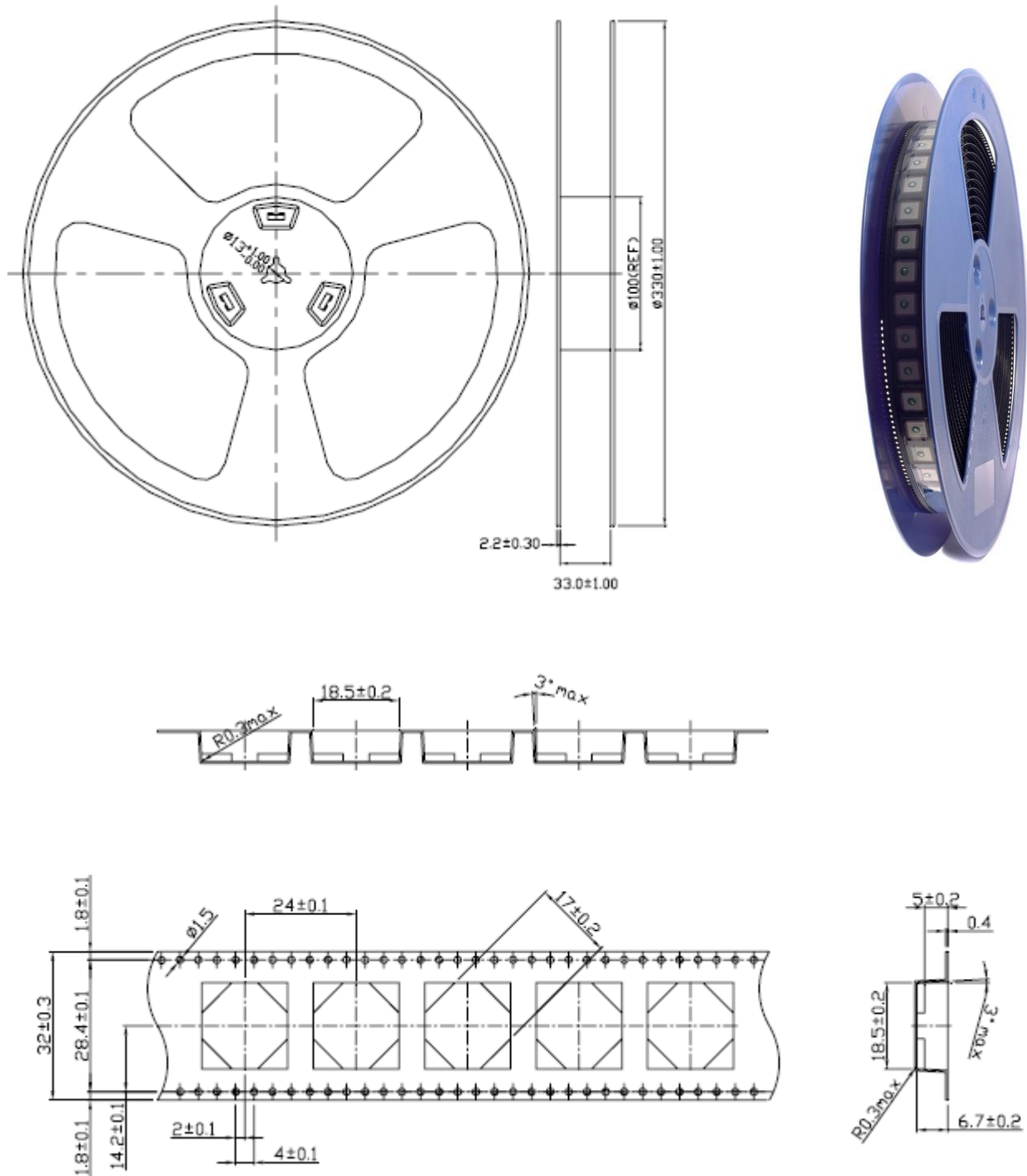


### 3.4 Test Fixture set up and measurements





### 3.5 Delivery Mode





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# 4. Smith Chart

