

## SPECIFICATION

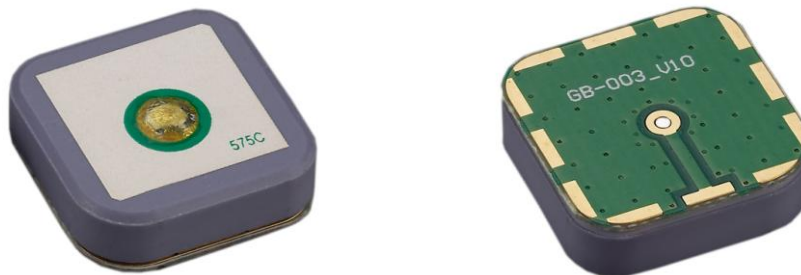
Model No. : **SGP.15a**

Part No. : **SGP.1575.15.4.A.02**

Product Name : **GPS SMT Patch Antenna**

Features : 15mm\*15mm\*4.5mm  
1575MHz Centre Frequency  
Patent Pending

**RoHS** ✓



## 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 45x45mm ground plane.

## 2.0 Key Antenna Performance Indicators

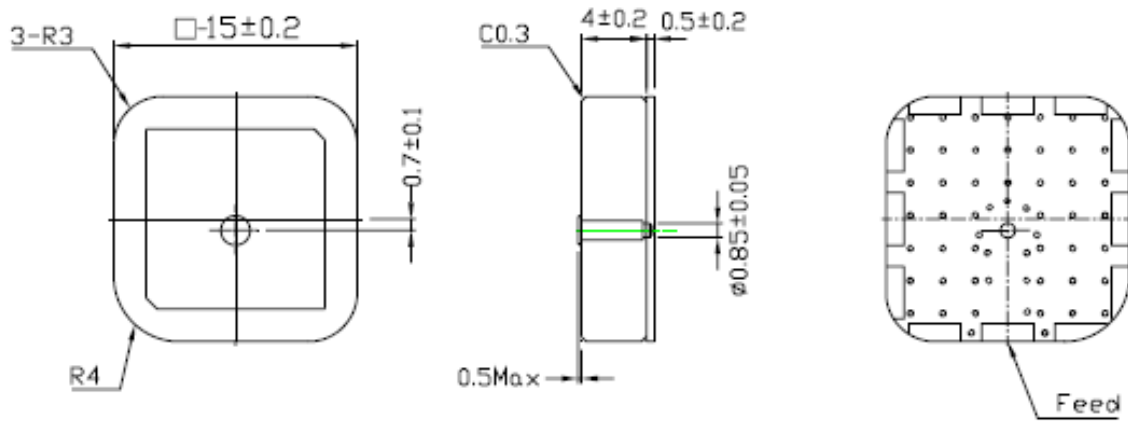
### Original Patch Specification tested on 45mm ground plane

No	Parameter	Specification	Notes
1	Range of Receiving Frequency	1575.42 MHz ± 1.023 MHz	
2	Center Frequency	1575.42 ± 3MHz	With 45mm <sup>2</sup> ground plane
3	Bandwidth	6MHz min	Return Loss ≤ -10 dB
4	VSWR	1.5 max	
5	Gain at Zenith	+1.0 dBic typ.	
6	Gain at 10° elevation	-	
7	Axial Ratio	3.0 dB max	
8	Polarization	RHCP	
9	Impedance	50 Ohms	
10	Frequency Temperature Coefficient ( Tf )	0 ± 20ppm / °C	-40°C to +85°C
11	Operating Temperature	-40°C to +85°C	

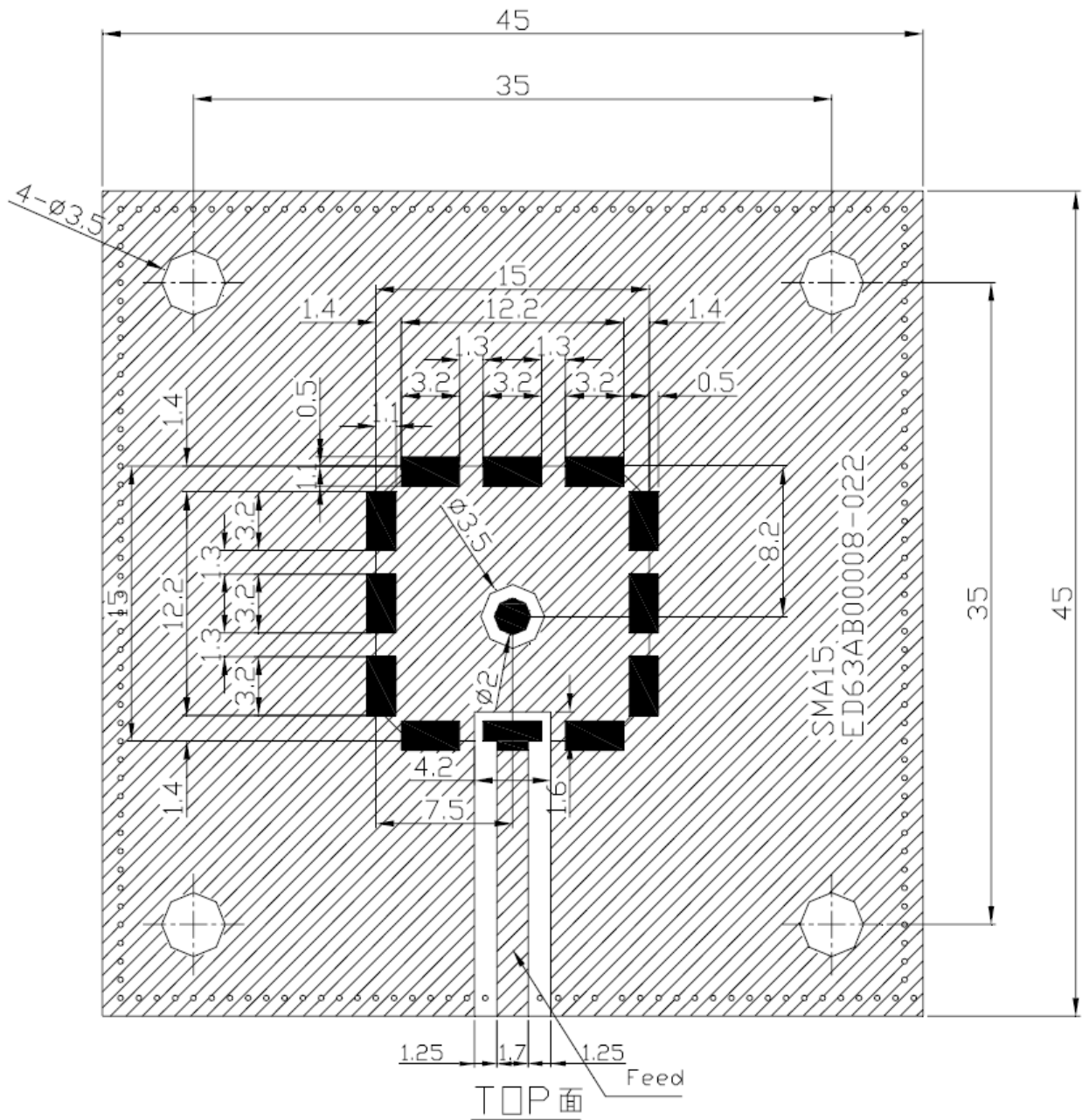
**\*\*Changes in user groundplane and environment will offset centre frequency**

## 3.0 Mechanical Specifications

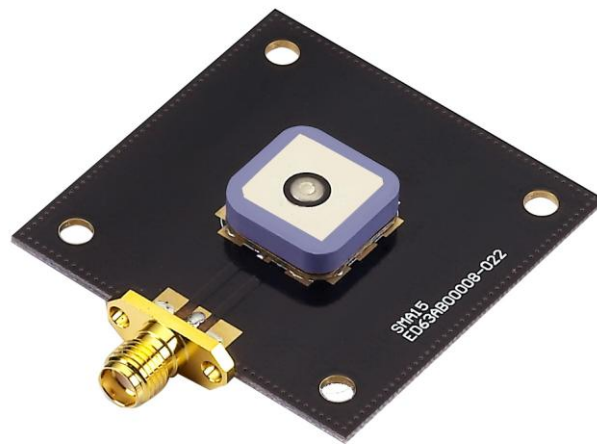
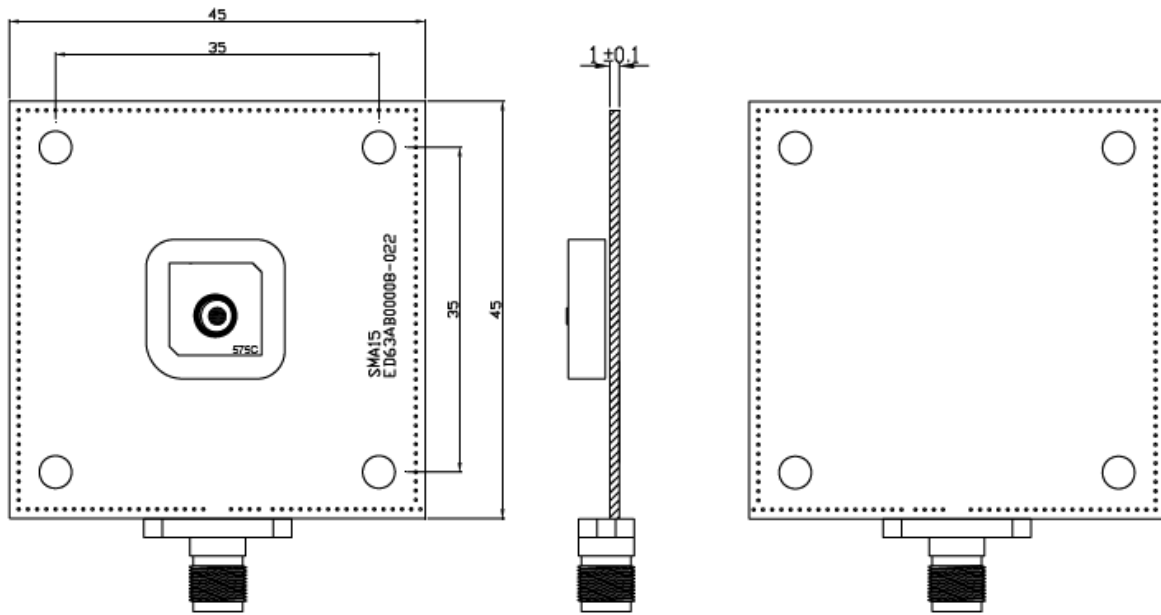
### 3.1 Dimensions and Drawing



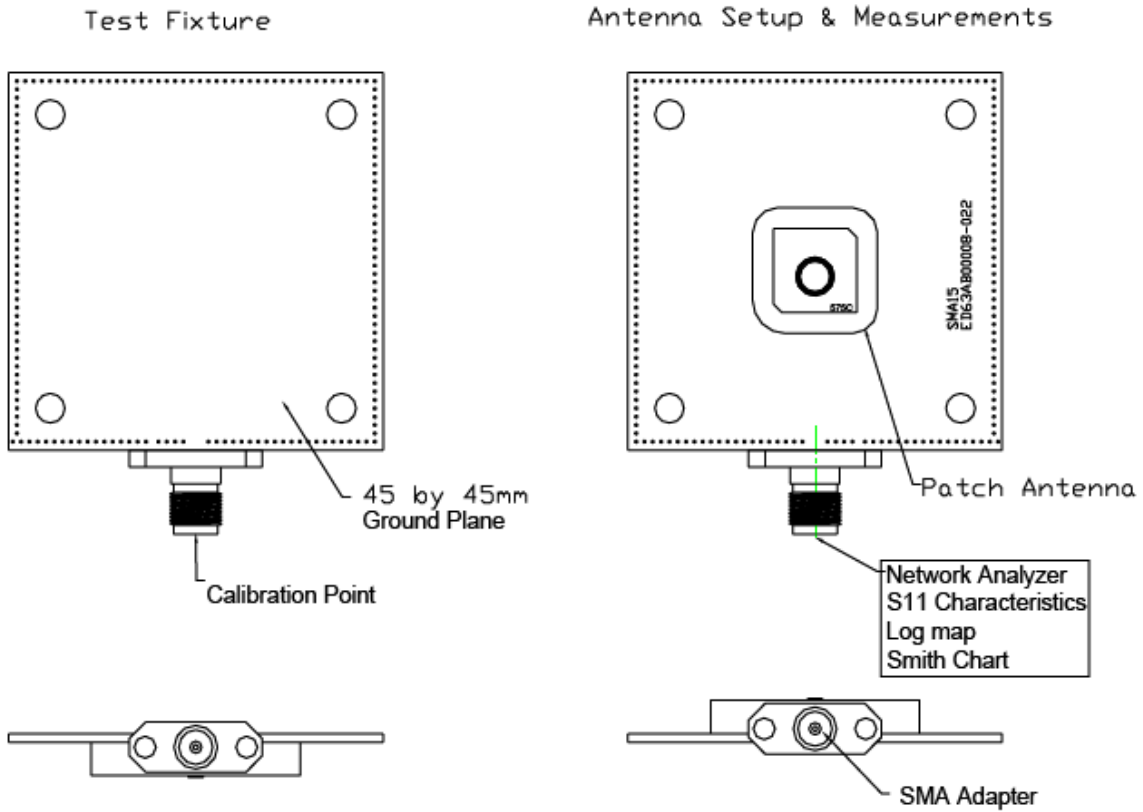
### 3.2 Antenna footprint



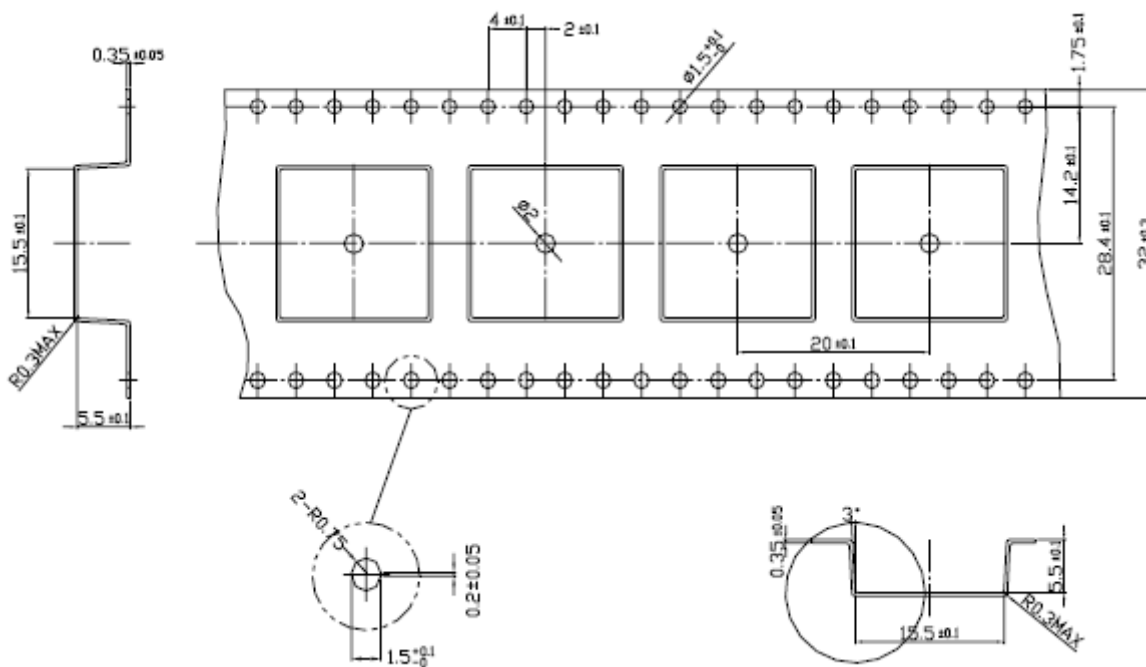
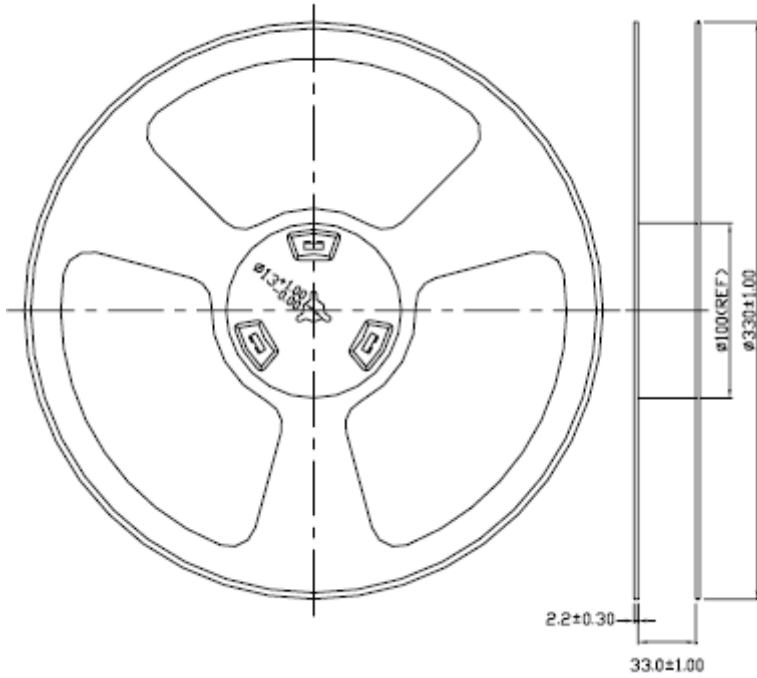
### 3.3 Test Jig and Dimension



### 3.4 Test Fixture set up and measurements



### 3.5 Delivery Mode



## 4. Smith Chart

