

# AMC-ANTGPSCP25X4-01

## GPS Patch Antenna

### MICROWAVE DIELECTRIC ANTENNA SPECIFICATION

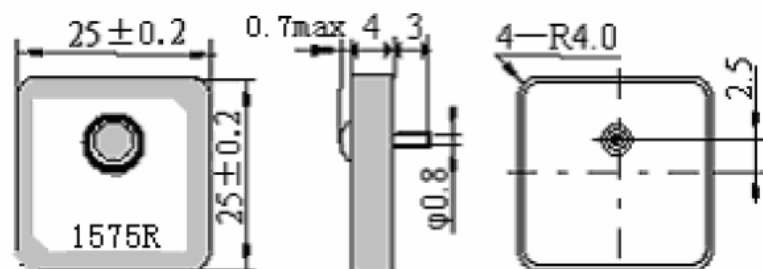
#### 1. Introduction

The AMC-ANTGPSCP25X4-01 GPS ceramic patch antenna incorporates microwave dielectric elements to ensure good frequency selection characteristics in a compact 25mm x 25mm x 4mm module. Performance is further enhanced by a rectangular micro-strip design for right-hand circular polarisation wave reception and low R/L and axial ratios for improved gain.

#### 2. Ordering Information

AMC-ANTGPSCP25X4-01

#### 3. Dimensions (mm)



#### 4. Structure and Material

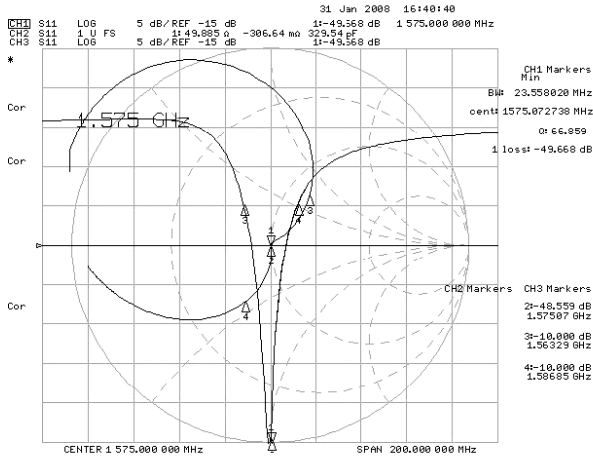
Description	Structure and Material
Antenna Substrate	Dielectric Ceramics
Pin	Cu, Sn Plated
Electrode	Ag Plated
Ground Base	Ag Plated
Adhesive Backing	3M FP9469PC

#### 5. Electrical Characteristics

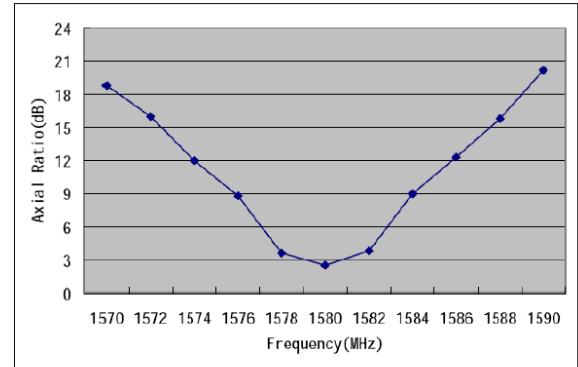
Characteristic	Value
Centre Frequency (At 70x70mm GND PLANE)	1575MHz+/-2MHz
Return Loss (At Centre Frequency)	Min value <-20dB
Band Width (at-10dB return loss)	10MHz min
Gain @Zenith	4.5dBi typical
Axial Ratio	3.0 dB max
VSWR	1.5:1 max
Impedance	50 $\Omega$
Operating Temperature	-40C~+85C

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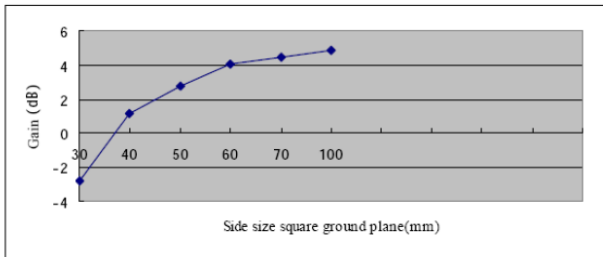
### Return Loss and Smith Chart



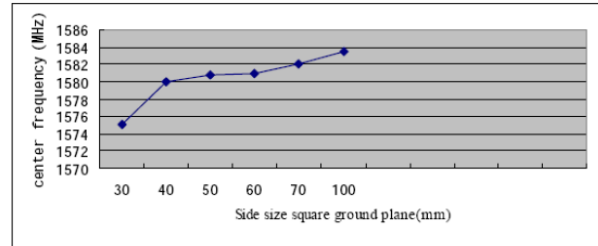
### Measured Axial Ratio



### Antenna Gain vs. Ground Plane Size



### Centre Frequency vs. Ground Plane Size



### Radiation pattern

