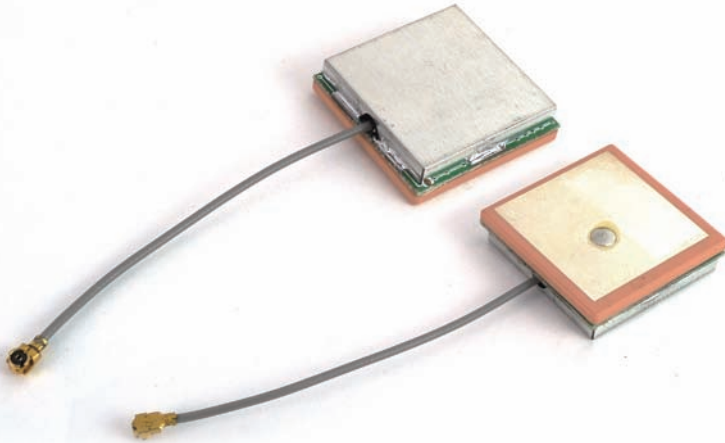


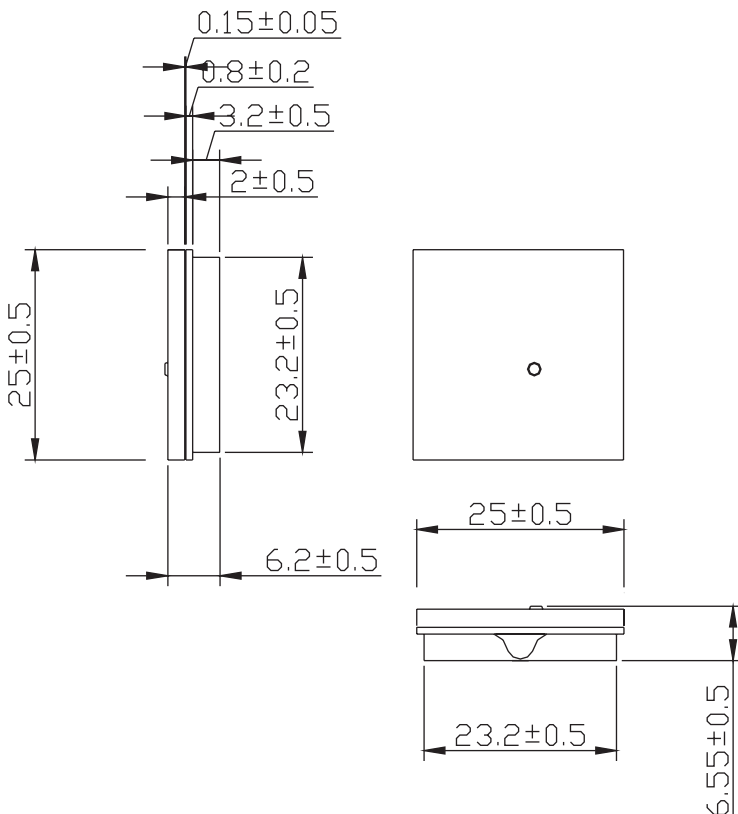
# AE006 GPS Module Antenna

## Active Ceramic Patch Antenna with Embedded LNA Module

Product No. AE00653GPS000



### Dimensions (unit: mm)



### Application

- Navigation systems or position tracking systems
- Hand-held devices when GPS function is needed, e.g., PDA, Smart phone, PND.

### Features

- Stable and reliable in performances
- Low temperature coefficient of frequency
- Compact size
- RoHS compliance

### Physical Specification

Dimensions	25 x 25 x 6.55 mm
Weight	12.3 ± 1 g (typ)
Operating Condition	Temperature -40 °C ~ +90 °C
	Humidity 10 ~ 95% RH
Storage Condition	Temperature -40 °C ~ +90 °C
	Humidity 10 ~ 95% RH

### Electrical Specification

#### Patch

Center Frequency	1575.42±1.023 MHz *when covered with a radome and measured by LNA ground plane
Bandwidth (10dB return loss)	10 MHz Min.
Gain at Zenith	1 dBic typ.
Gain at 10° elevation	-5.0 dBic typ.
Polarization	R.H.C.P
Axial Ratio	1.0 dB typ
Patch size	25 x 25 x 2 mm

#### Filter/LNA

Center Frequency	1575.42 ± 1.023 MHz
Gain	26~35 dB typ. (PS: 3V / 28dB)
Noise Figure	1.5 dB typ. (PS: 3V / 1.5dB)
Filter (Out of band attenuation)	Dielectric filter 7dB min. fo±20MHz 20dB min. fo±50MHz 30dB min. fo±100MHz (fo=1575.42MHz)
Output V.S.W.R	2.0 max
Voltage	DC = 2.7~5.5V
Current	DC = 9~23mA at 3V (PS: 3V / 10mA)

All value are defined at 25±15 °C ,65±20 % RH, power handling 1 μw, air pressure 960 ±100 HPA unless otherwise noted.