

# GPS Active Antenna Module - Adhesive Mount

**APAMP-116**

RoHS/RoHS II compliant

Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-1)



44.0 X 37 X 14.5mm

MSL level: Not Applicable

## FEATURES:

- High Reliability/Sensitivity
- Compact Size
- Easy to install (adhesive base tape)
- ROHS Compliant

## TYPICAL APPLICATIONS:

- Automotive Navigation
- Automotive Monitoring
- Personal Tracking

## STANDARD SPECIFICATIONS:

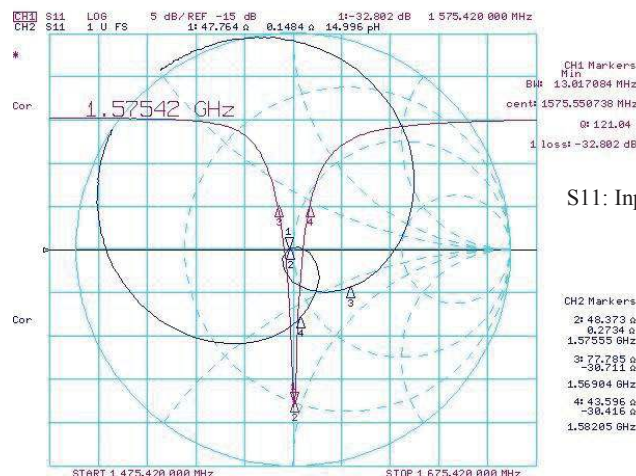
### Antenna

| Parameters               | Min.    | Typ.    | Max.    | Units              | Note                               |
|--------------------------|---------|---------|---------|--------------------|------------------------------------|
| Frequency                | 1574.40 | 1575.42 | 1576.44 | MHz                |                                    |
| Bandwidth                | 10.0    |         |         | MHz                |                                    |
| VSWR at Center Frequency |         |         | 1.5:1   |                    |                                    |
| Polarization Model       | RHCP    |         |         |                    | (Right Hand Circular Polarization) |
| Impedance                |         | 50      |         | $\Omega$           |                                    |
| Gain                     |         | 5       |         | dBic               | (Based on 70x 70mm ground plane)   |
| Operating Temperature    | -40     |         | +80     | $^{\circ}\text{C}$ |                                    |
| Storage Temperature      | -45     |         | +85     | $^{\circ}\text{C}$ |                                    |

### Low Noise Amplifier (LNA)

| Parameters   | Min.    | Typ.    | Max.    | Units | Note   |
|--------------|---------|---------|---------|-------|--|
| Frequency    | 1574.40 | 1575.42 | 1576.44 | MHz   |  |
| DC Voltage   | 2.5     | 3.0     | 3.5     | V     |  |
| Gain         | 25      | 27      | 29      | dB    | (+25 $^{\circ}\text{C} \pm 10^{\circ}\text{C}$ ) |
| Output VSWR  |         |         | 2.0     |       |  |
| Noise Figure |         |         | 1.5     |       | (+25 $^{\circ}\text{C} \pm 10^{\circ}\text{C}$ ) |
| DC current   |         | 10      | 12.5    | mA    | (At 3.0V)  |

## ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



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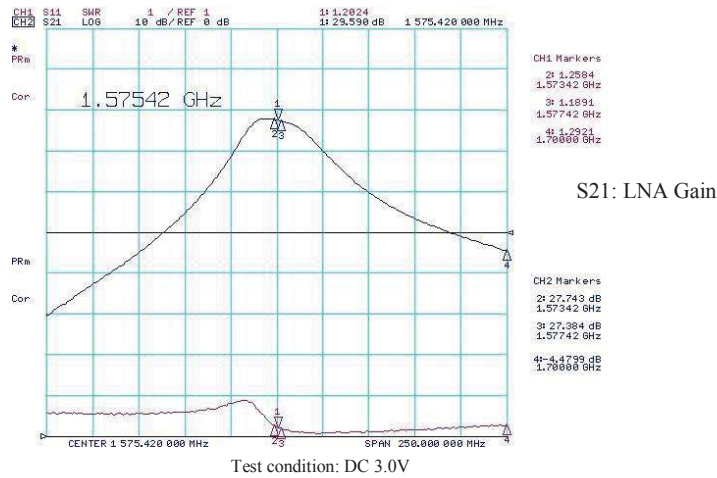
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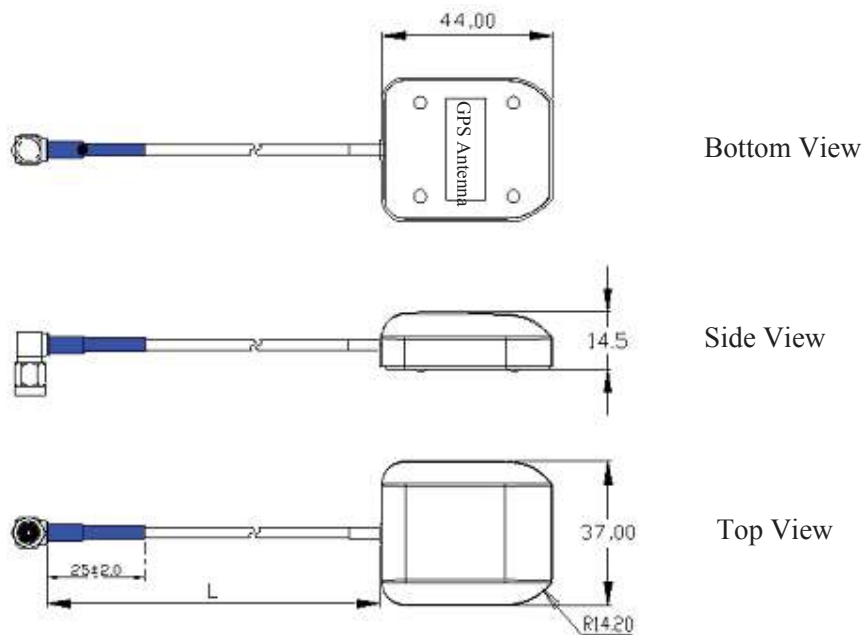


44.0 X 37 X 14.5mm

## LNA REFLECTION PROFILE



## OUTLINE DRAWING:



Unit:mm

| Parameters       | Description         |
|------------------|---------------------|
| L (Cable Length) | 300±10cm            |
| Antenna          | Dielectric Ceramics |
| RF Cable         | RG174               |
| PCB              | FR4                 |
| RF Connector     | SMA-JW3             |
| Shielding        | Tinplate            |
| Thickness        | 15mm                |
| Mounting Type    | Adhesive Tape       |

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REVISED: 11/01/2019

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## PRODUCT IMAGE:



## PACKAGING:

Each 475x215x215 mm size carton includes 100 pieces of antenna.



### CAUTION:

- (1) Do not apply excess mechanical stress to the component body or terminations. Do not attempt to re-form or bend the components as this will cause damage to the component.
- (2) Do not expose the component to open flame.
- (3) This specification applies to the functionality of the component as a single unit. Please insure the component is thoroughly evaluated in the application circuit.

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