

# GPS Active Antenna Module - Adhesive Mount

## APAMP-115

RoHS/RoHS II compliant

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



40.0 X 35.0 X 13.1mm

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:

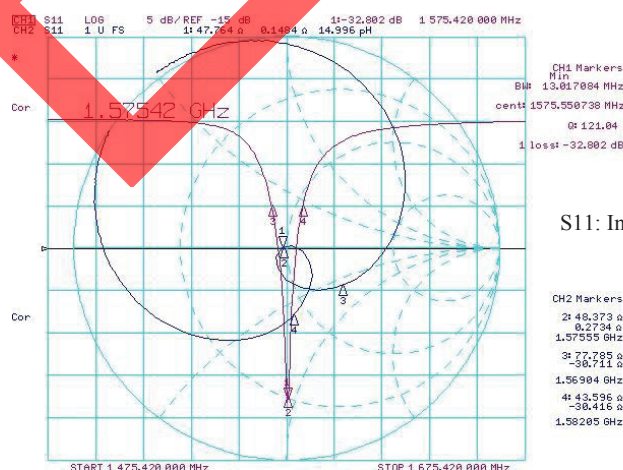
#### Antenna

| Parameters            | Min.    | Typ.    | Max.    | Units              | Note                               |
|-----------------------|---------|---------|---------|--------------------|------------------------------------|
| Center Frequency      | 1574.40 | 1575.42 | 1576.44 | MHz                |                                    |
| Bandwidth             | 10.0    |         |         | MHz                |                                    |
| VSWR                  |         |         | 1.5:1   |                    |                                    |
| Polarization Model    | RHCP    |         |         |                    | (Right Hand Circular Polarization) |
| Impedance             |         | 50      |         | $\Omega$           |                                    |
| Gain                  |         | 3.5     |         | dBic               | (Based on 70x70mm 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                                             |
|------------------|---------|---------|---------|-------|--------------------------------------------------|
| Center Frequency | 1574.40 | 1575.42 | 1576.44 | MHz   |                                                  |
| DC Voltage       | 2.5     |         | 3.5     | V     |                                                  |
| Gain             | 26      | 28      | 30      | dB    | (+25 $^{\circ}\text{C} \pm 10^{\circ}\text{C}$ ) |
| Output VSWR      |         |         | 2.0     |       |                                                  |
| Noise Figure     |         |         | 1.8     |       | (+25 $^{\circ}\text{C} \pm 10^{\circ}\text{C}$ ) |
| DC current       |         | 14      | 16      | mA    | (At 3.0V)                                        |

### ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



Test condition: 20x20mm ground

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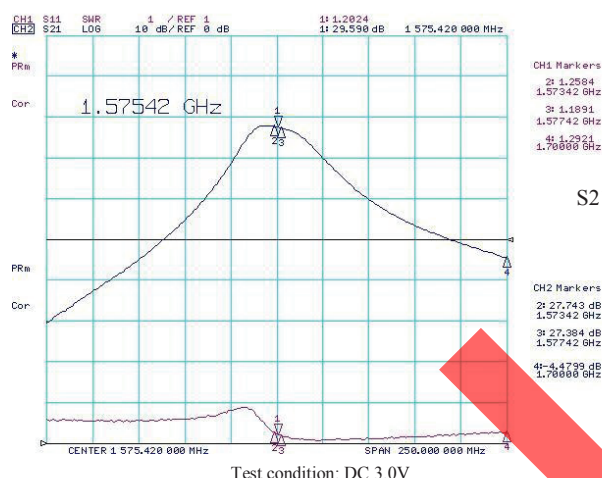
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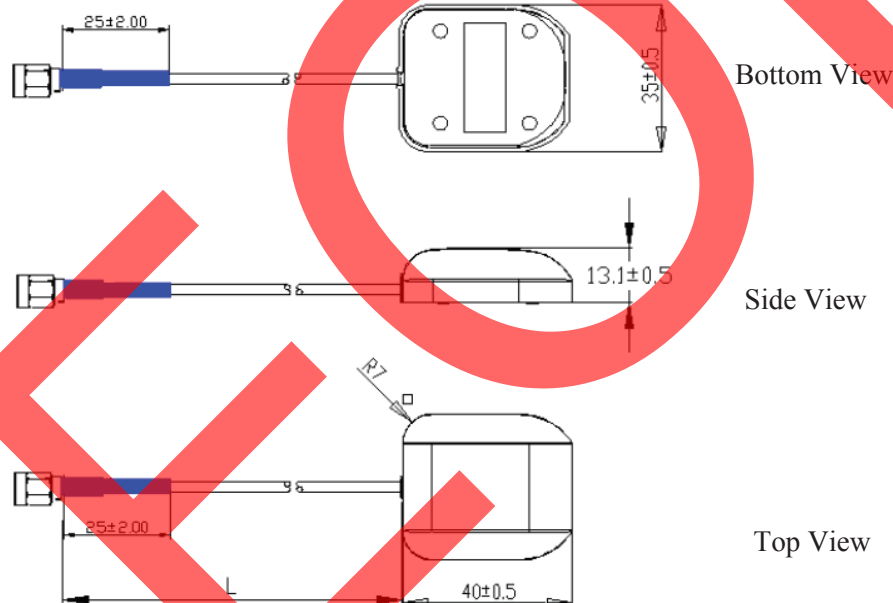


40.0 X 35.0 X 13.1mm

## LNA REFLECTION PROFILE



## OUTLINE DRAWING:



| Parameters       | Description        |
|------------------|--------------------|
| L (Cable Length) | 300±10cm           |
| Antenna          | Dielectric Ceramic |
| RF Cable         | RG174              |
| PCB              | FR4                |
| RF Connector     | SMA-J3             |
| Shielding        | Tinplate           |
| Thickness        | 13.5mm             |
| Mounting Type    | Adhesive Tape      |

Unit:mm

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## PRODUCT IMAGE:



## PACKAGING:

Each 475 x 215 x 215 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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