

GPS Active Antenna Module

APAMP-109

RoHS/RoHS II compliant

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



50.6 X 50.6 X 15.1mm

MSL level: Not Applicable

FEATURES:

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

TYPICAL APPLICATIONS:

- Automotive Navigation
- Automotive Monitoring
- Personal Tracking

STANDARD SPECIFICATIONS:

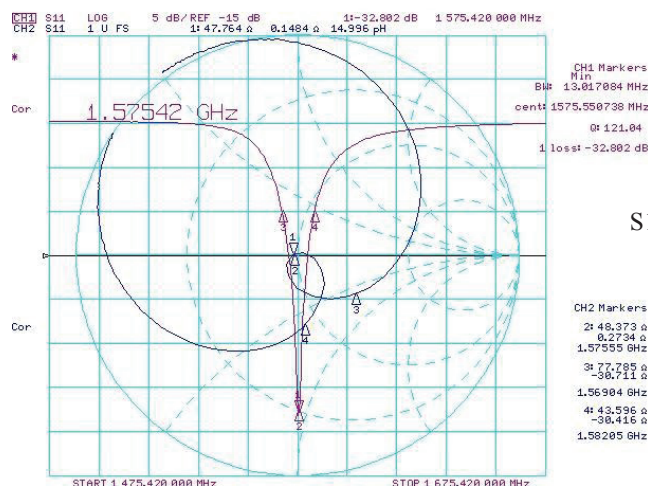
Antenna

| 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 | | Ω | |
| Gain | | 5 | | dBic | (Based on 70× 70mm ground plane) |

Low Noise Amplifier (LNA)

| Parameters | Min. | Typ. | Max. | Units | Note |
|--------------|---------|---------|---------|-------|----------------|
| Frequency | 1574.40 | 1575.42 | 1576.44 | MHz | |
| DC Voltage | 2.5 | | 3.5 | V | |
| Gain | 25 | 26 | 28 | dB | (+25°C ± 10°C) |
| Output VSWR | | | 2.0 | | |
| Noise Figure | | | 1.5 | | (+25°C ± 10°C) |
| DC current | | 10 | 12.5 | mA | (At 3.0V) |

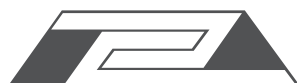
ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



S11: Input VSWR

Test condition: 39x39mm ground

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GPS Active Antenna Module

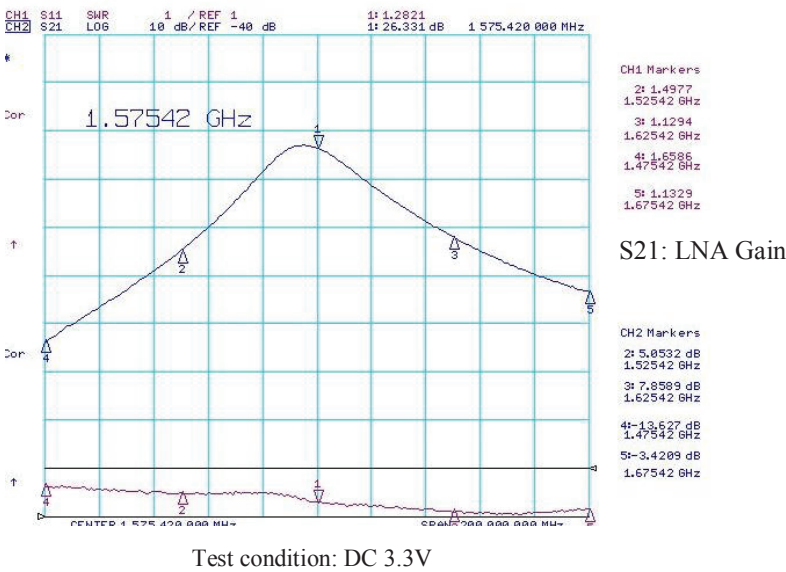
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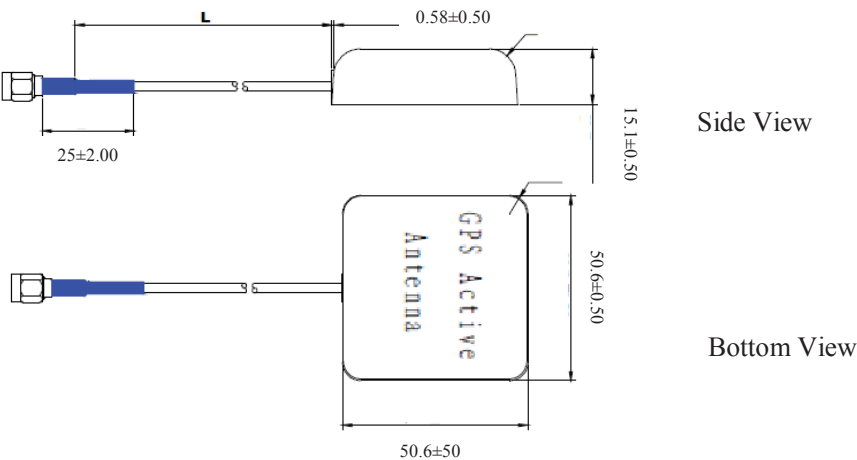


50.6 X 50.6 X 15.1mm

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 | 15.5mm |

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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