

# GPS Active Antenna Module - Adhesive Mount



38.3 X 35 X 13.5mm

**APAMP-111**

RoHS/RoHS II compliant  
Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-1)

MSL level: Not Applicable

## FEATURES:

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

## TYPICAL APPLICATIONS:

- Automotive Navigation
- Automotive Monitoring
- Personal Tracking

## STANDARD SPECIFICATIONS:

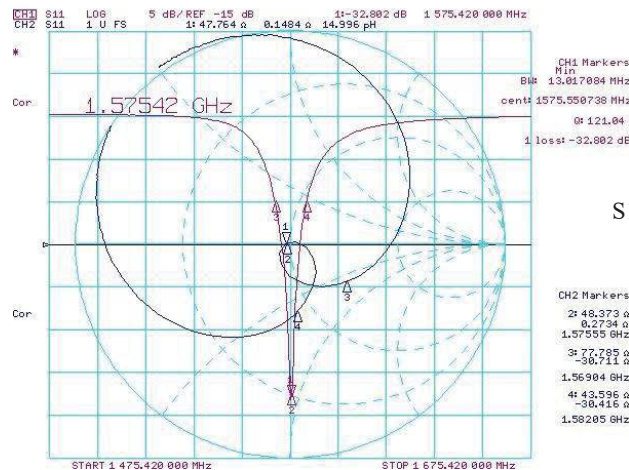
### Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency		1575.42 ± 1.023		MHz	
Bandwidth	10.0			MHz	
VSWR at Center Frequency			1.5:1		
Polarization Model	RHCP				(Right Hand Circular Polarization)
Impedance		50		Ω	
Gain		4.5		dBic	(Based on 70× 70mm ground plane)
Operating Temperature	-40		+80	°C	
Storage Temperature	-45		+85	°C	

### Low Noise Amplifier (LNA)

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency		1575.42 ± 1.023		MHz	
DC Voltage	3.0		5.0	V	
Gain	25	28	31	dB	(+25°C ± 10°C)
Output VSWR			2.0		
Noise Figure			1.5		(+25°C ± 10°C)
DC current	5.5	8.5	11.5	mA	(At 3.0V)

## ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



S11: Input VSWR

Test condition: 25x25mm ground

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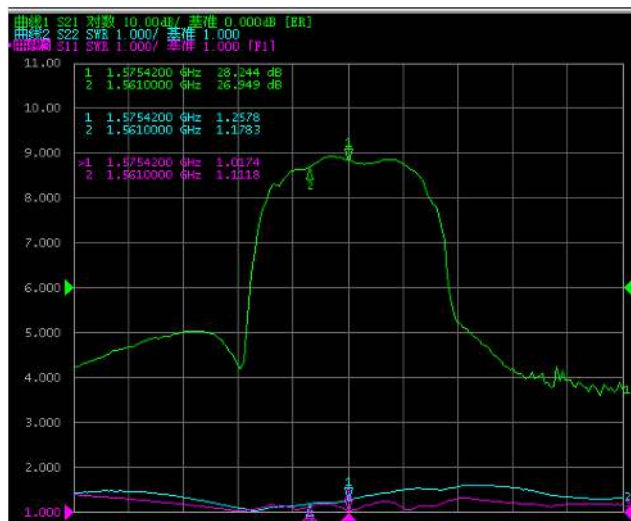
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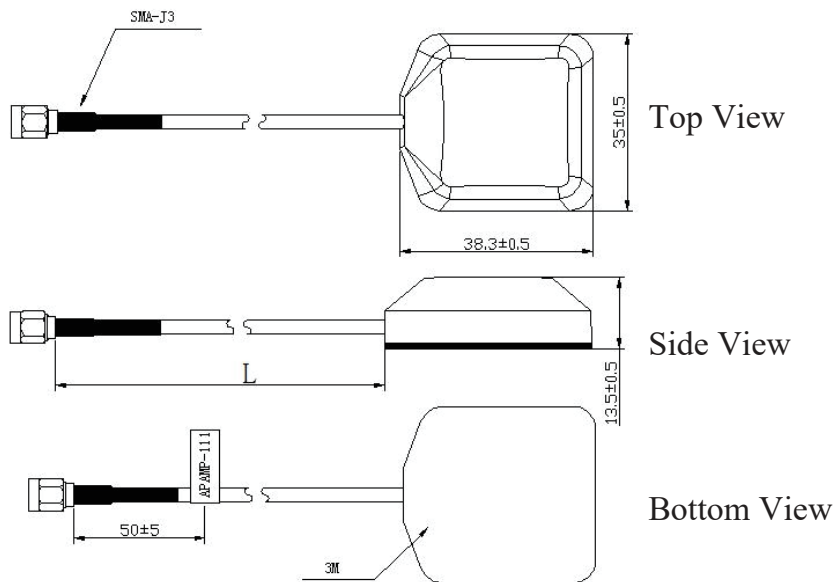


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## LNA REFLECTION PROFILE



## 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
Adhesive Tape	3M9448A

Unit:mm



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



38.3 X 35 X 13.5mm

## Environmental Specification

Parameters	Specification
Operating Temperature	-40°C to +80°C
Storage Temperature	-40°C to +85°C
RoHS/ RoHS II Compliant	Yes
Material Composition	Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-I)
IP Rating	IP66
ESD Protection	±6 kV (direct discharge) ±8 kV (air discharge)
Mounting Type	Adhesive Tape
MSL Level	N/A
Handling	No special handling conditions

## PRODUCT IMAGE:



## PACKAGING:

Each 630 x 460 x 105 mm size carton includes 100 pcs antenna, each lattice contains 2 antennas.



### 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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