# **GPS Active Antenna Module - Adhesive Mount**

## **APAMP-111**

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



**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:

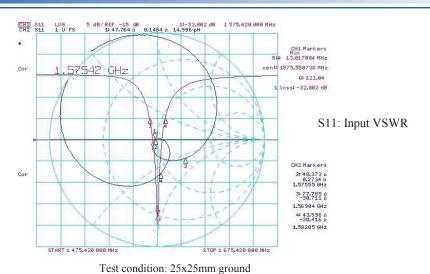
#### Antenna

Parameters	Min.	Тур.	Max.	Units	Note
Center Frequency		$1575.42 \pm 1.023$		MHz	
Bandwidth	10.0			MHz	
VSWR at Center Frequency			1.5:1		
Polarization Model		RHCP			(Right Hand Circular Polarization)
Impedance		50		Ω	
Gain		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		$1575.42 \pm 1.023$		MHz	
DC Voltage	3.0		5.0	V	
Gain	25	28	31	dB	$(+25^{\circ}\text{C} \pm 10^{\circ}\text{C})$
Output VSWR			2.0		
Noise Figure			1.5		$(+25^{\circ}C \pm 10^{\circ}C)$
DC current	9.0	12.0	15.0	mA	(At 3.0V)

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





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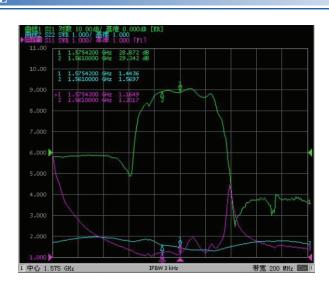
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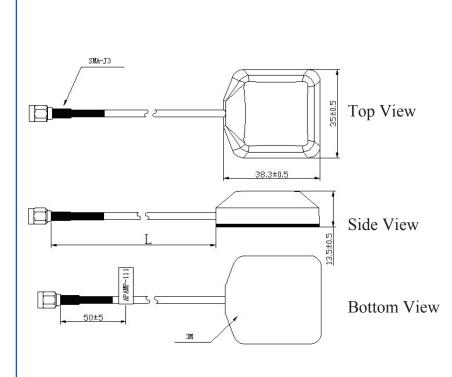
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### LNA REFLECTION PROFILE



### **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			
Mounting Type	Adhesive Tape			

Unit:mm



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### **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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