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

### **APAMP-109**

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 base tape)
- ROHS Compliant

### > TYPICAL APPLICATIONS:

- Automotive Navigation
- Automotive Monitoring
- Personal Tracking

### **STANDARD SPECIFICATIONS:**

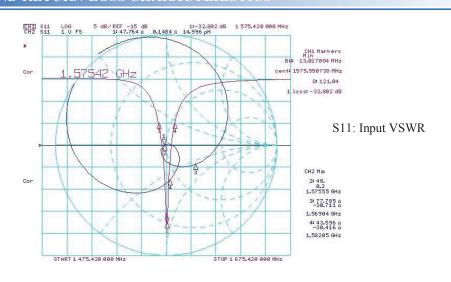
#### Antenna

Parameters	Min.	Тур.	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)
Operating Temperature	-40		+80	°C	
Storage Temperature	-45		+85	°C	

### Low Noise Amplifier (LNA)

Parameters	Min.	Тур.	Max.	Units	Note
Frequency	1574.40	1575.42	1576.44	MHz	
DC Voltage	2.5		3.5	V	
Gain	25	26	28	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		10	12.5	mA	(At 3.0V)

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



Test condition: 39x39mm ground





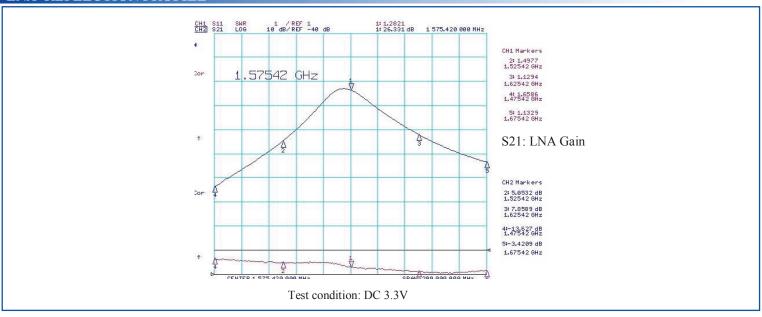
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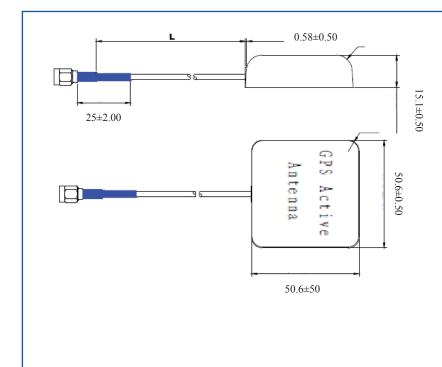
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### LNA REFLECTION PROFILE



### **OUTLINE DRAWING:**



Side View

**Bottom View** 

Parameters	Description
L (Cable Length)	300±10cm
Antenna	Dielectric Ceramic
RF Cable	RG174
PCB	FR4
RF Connector	SMA-J3
Shielding	Tinplate
Thickness	15.5mm
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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