

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# **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:

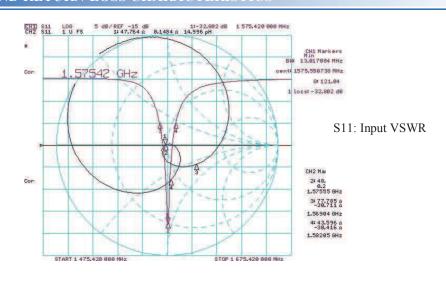
#### Antenna

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	$(+25^{\circ}C \pm 10^{\circ}C)$
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





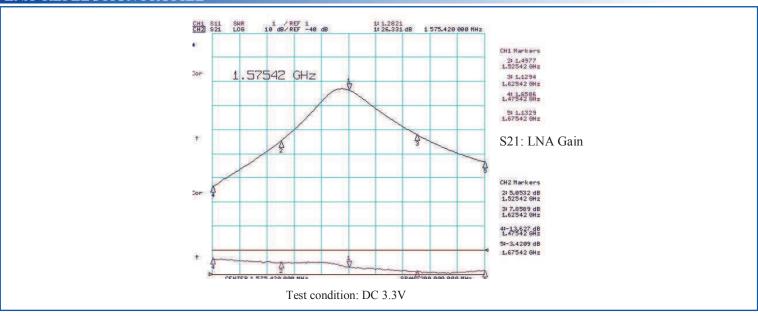
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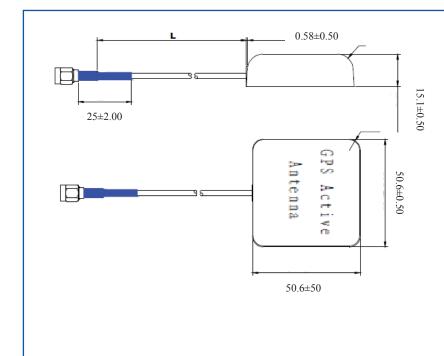
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### LNA REFLECTION PROFILE



### **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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