GPS Active Antenna Module

APAMP-114

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

26.0 X 23 X 12mm

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:

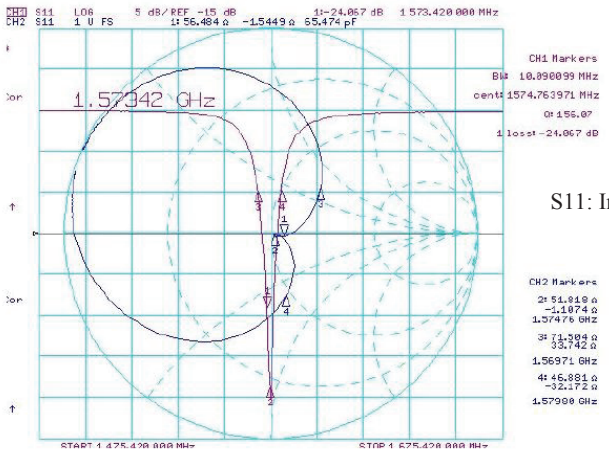
Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Frequency	1574.40	1575.42	1576.44	MHz	
Bandwidth	5.0			MHz	
VSWR at Center Frequency			1.5:1		
Polarization Model		RHCP			(Right Hand Circular Polarization)
Impedance		50		Ω	
Gain		1		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		6.0	V	
Gain	24	26	28	dB	(+25°C ± 10°C)
Output VSWR			2.0		
Noise Figure			1.6		(+25°C ± 10°C)
DC current		11	13	mA	(At 5.0V)

ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



S11: Input VSWR

Test condition: 15x15mm ground

30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

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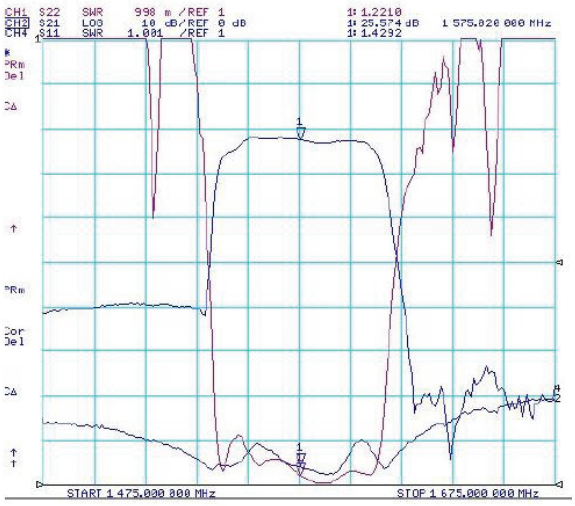
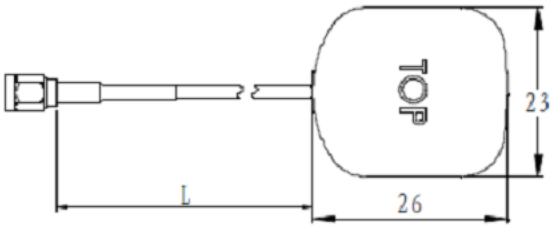
LNA REFLECTION PROFILE



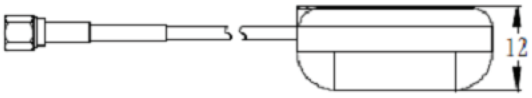
S21: LNA Gain

Test condition: DC 5.0V

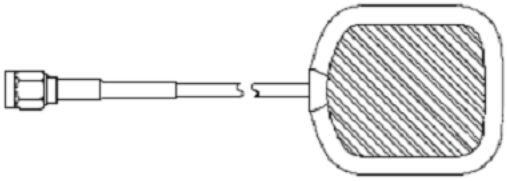
OUTLINE DRAWING:



Top View



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	12mm
Mounting Tape	3M Glue

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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