

GPS Active Antenna Module

APAMP-114

RoHS/RoHS II compliant

Lead in copper alloy exemption (6c); and Lead in glass exemption (7c-1)



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:

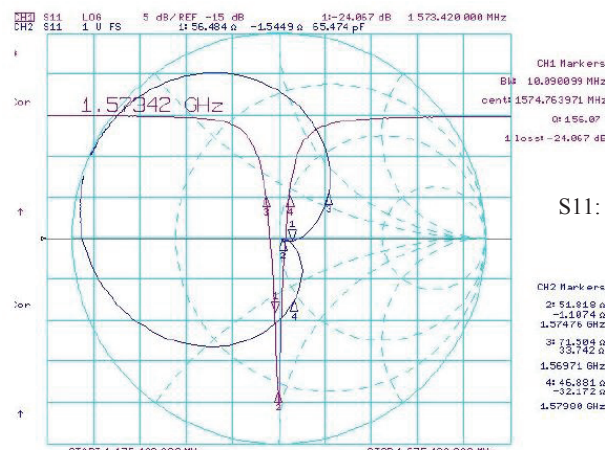
Antenna

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

ABRACON IS
ISO9001:2008
CERTIFIED



Visit www.abracon.com for Terms & Conditions of Sale **Revised: 02.24.13**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com

GPS Active Antenna Module

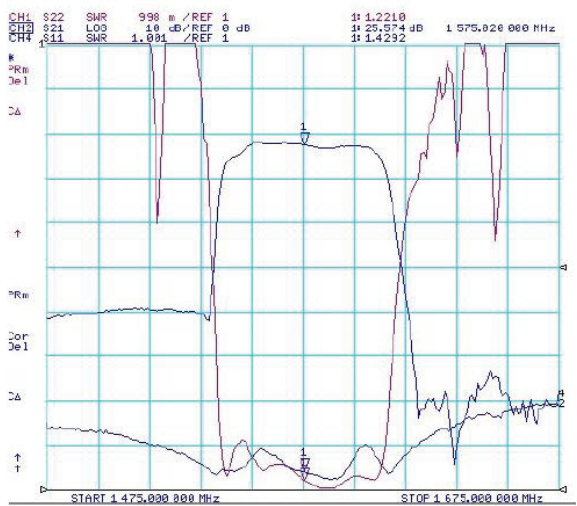
APAMP-114

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



26.0 X 23 X 12mm

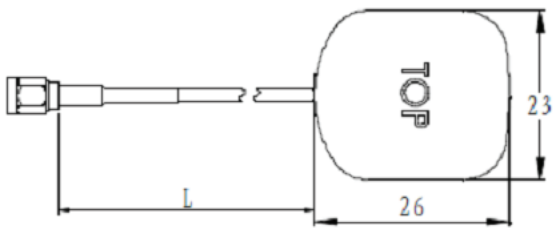
LNA REFLECTION PROFILE



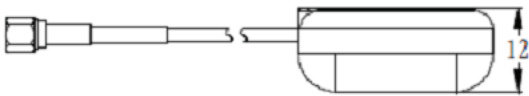
S21: LNA Gain

Test condition: DC 5.0V

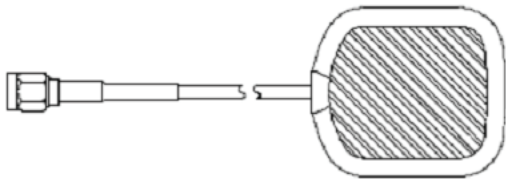
OUTLINE DRAWING:



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

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

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.

ATTENTION: Abracon Corporation's products are COTS – Commercial-Off-The-Shelf products; suitable for Commercial, Industrial and, where designated, Automotive Applications. Abracon's products are not specifically designed for Military, Aviation, Aerospace, Life-dependant Medical applications or any application requiring high reliability where component failure could result in loss of life and/or property. For applications requiring high reliability and/or presenting an extreme operating environment, written consent and authorization from Abracon Corporation is required. Please contact Abracon Corporation for more information.

ABRACON IS
ISO9001:2008
CERTIFIED



ABRACON
CORPORATION

Visit www.abracon.com for Terms & Conditions of Sale **Revised: 02.24.13**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com