

ECN/PCN No.: R0341

For Manufacturer			
Product Description: GPS Active Antenna Module - Magnet Base	Abracon Part Number / Part Series: APAMP-128	<input type="checkbox"/> Documentation only <input type="checkbox"/> ECN <input checked="" type="checkbox"/> EOL	<input type="checkbox"/> Series <input type="checkbox"/> Part Number
Affected Revision: IR	New Revision: EOL	Application:	<input type="checkbox"/> Safety <input checked="" type="checkbox"/> Non-Safety
Prior to Change:			
After Change: EOL			
Cause/Reason for Change: Standard product discontinuation			
Change Plan			
Effective Date: 02/10/2025	Additional Remarks:		
Change Declaration:			
Issued Date: 02/10/2025	Issued By: Urmila Madhipatla	Issued Department: Engineering	
Approval: Saravanan Subramanian Engineering Manager	Approval: Reuben Quintanilla Quality Director	Approval: Ying Huang Purchasing Director	
For Abracon EOL only			
Last Time Buy (if applicable):	Alternate Part Number / Part Series:		
Additional Approval:	Additional Approval:	Additional Approval:	
Customer Approval (If Applicable)			
Qualification Status: <div style="text-align: center;"> <input type="checkbox"/> Approved <input type="checkbox"/> Not accepted </div> <i>Note: It is considered approved if there is no feedback from the customer 1 month after ECN/PCN is released.</i>			
Customer Part Number:	Customer Project:		
Company Name:	Company Representative:	Representative Signature:	
Customer Remarks:			

GPS Active Antenna Module - Magnet Base



40.0 X 35.0 X 13.1mm

APAMP-128



ESD Sensitive

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

RoHS/RoHS II compliant

MSL level: Not Applicable

FEATURES:

- High Reliability/Sensitivity
- Compact Size
- Easy to install (magnet base)
- ROHS Compliant

TYPICAL APPLICATIONS:

- Automotive Navigation
- Automotive Monitoring
- Personal Tracking

STANDARD SPECIFICATIONS:

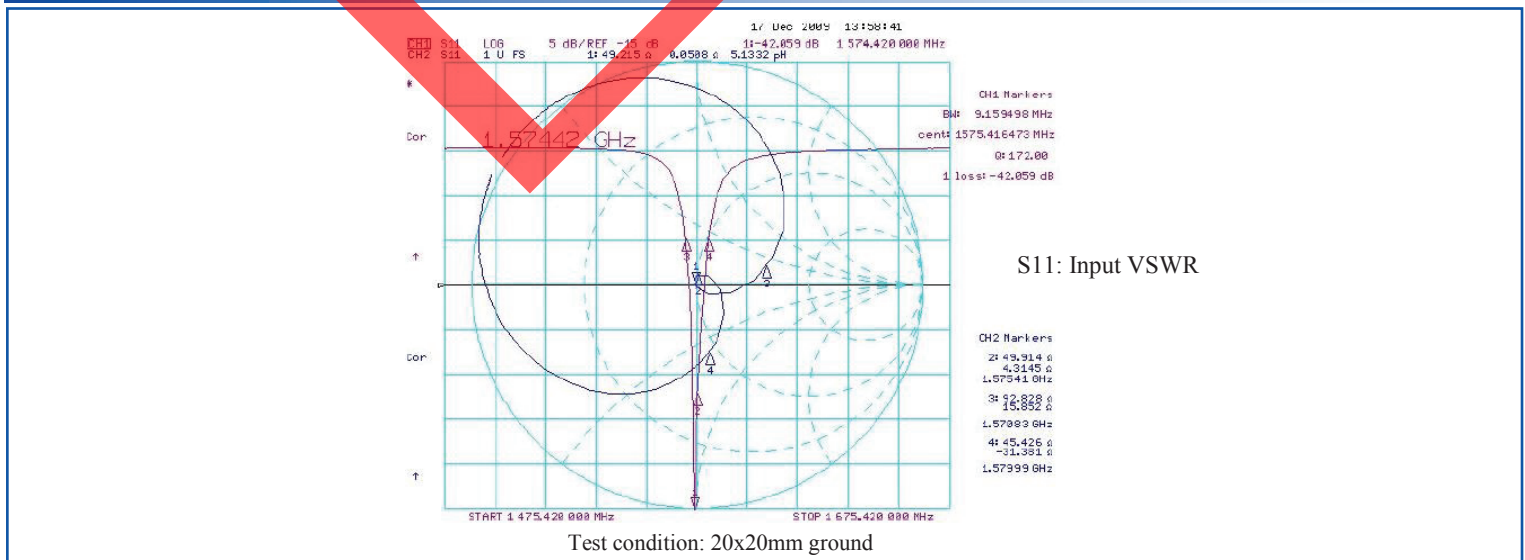
Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1574.40	1575.42	1576.44	MHz	
Bandwidth	10.0			MHz	
VSWR			1.5:1		
Polarization Model	RHCP				(Right Hand Circular Polarization)
Impedance		50		Ω	
Gain		2.0		dBic	(Based on 70x70mm ground plane)
Operating Temperature	-40		+80	$^{\circ}\text{C}$	
Storage Temperature	-45		+85	$^{\circ}\text{C}$	

Low Noise Amplifier (LNA)

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1574.40	1575.42	1576.44	MHz	
DC Voltage	3.0		5.0	V	
Gain	24	27	30	dB	(+25 $^{\circ}\text{C} \pm 10^{\circ}\text{C}$)
Output VSWR			2.0		
Noise Figure			1.5		(+25 $^{\circ}\text{C} \pm 10^{\circ}\text{C}$)
DC current	5.5	8.5	11.5	mA	(At 3.0V)

ANTENNA'S IMPEDANCE AND RETURN-LOSS CHARACTERISTICS



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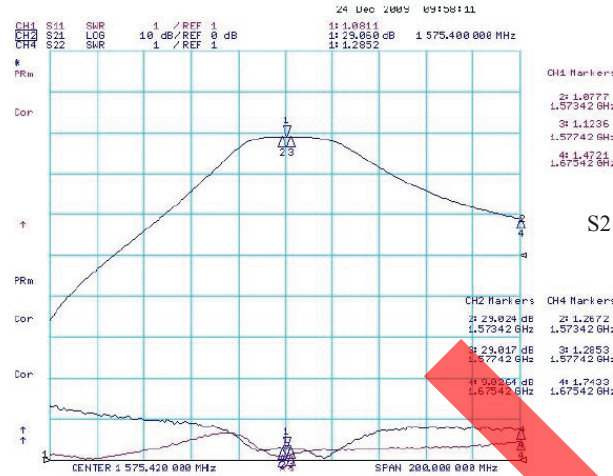


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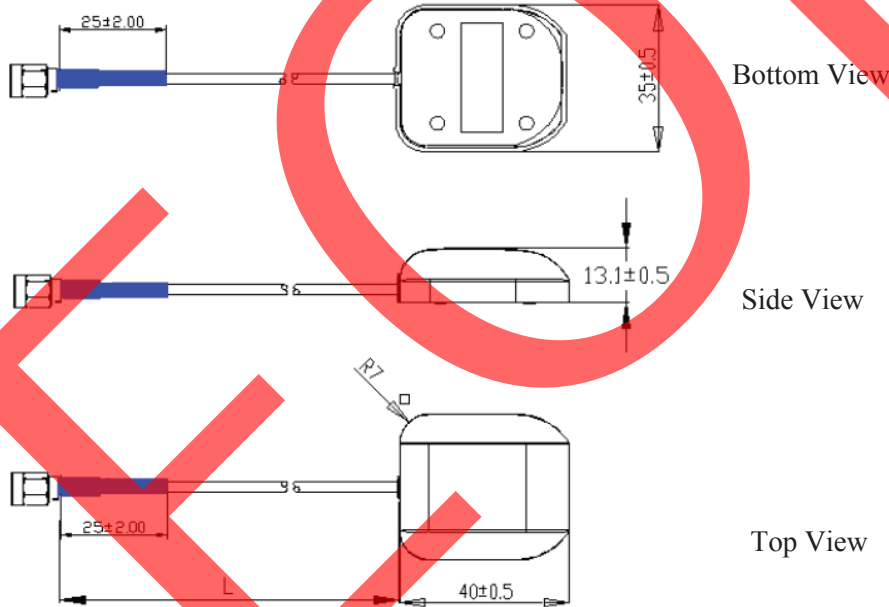
RoHS/RoHS II compliant

LNA REFLECTION PROFILE



S21: LNA Gain

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	Magnet Base

Unit:mm

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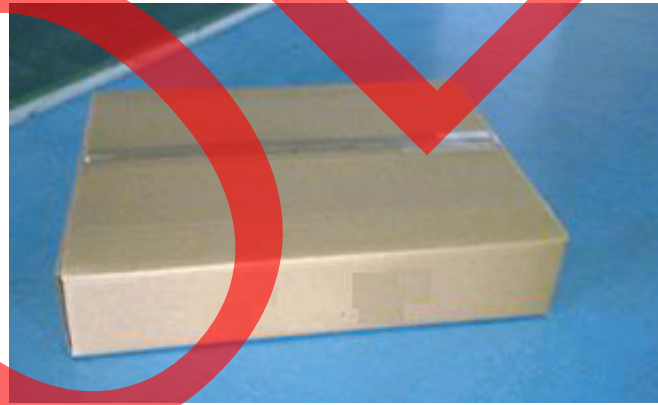
40.0 X 35.0 X 13.1mm

PRODUCT IMAGE:



PACKAGING:

Each 630 x 460 x 105 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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