

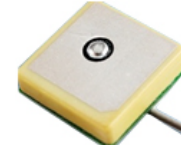
GPS Active Internal Patch

APAM1866YA18



ESD Sensitive

RoHS/RoHS II compliant



18.0 x 18.0 x 7.0mm

MSL level: Not Applicable

FEATURES:

- Compact Size
- Easy to Install
- RoHS Compliant

TYPICAL APPLICATIONS:

- Automotive Navigation, Marine buoys
- Personal Tracking
- Surveying equipment, Cell phone, Laptop
- Healthcare and medical monitoring devices, PND, PDA

STANDARD SPECIFICATIONS:

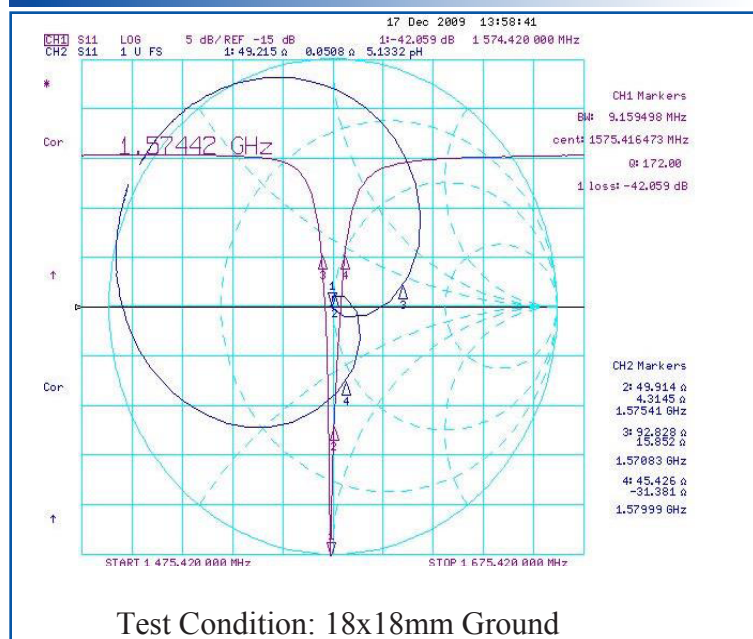
Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1575.42± 1.02			MHz	
Bandwidth	5			MHz	
Gain		2.0		dBic	(Peak gain on 70*70mm Ground Plane facing Zenith.)
VSWR @ Center Frequency		1.5			
Polarization Model	RHCP				(Right Hand Circular Polarization)
Impedance	50			Ω	
Working Temperature	-25		+72	°C	
Storage Temperature	-45		85	°C	

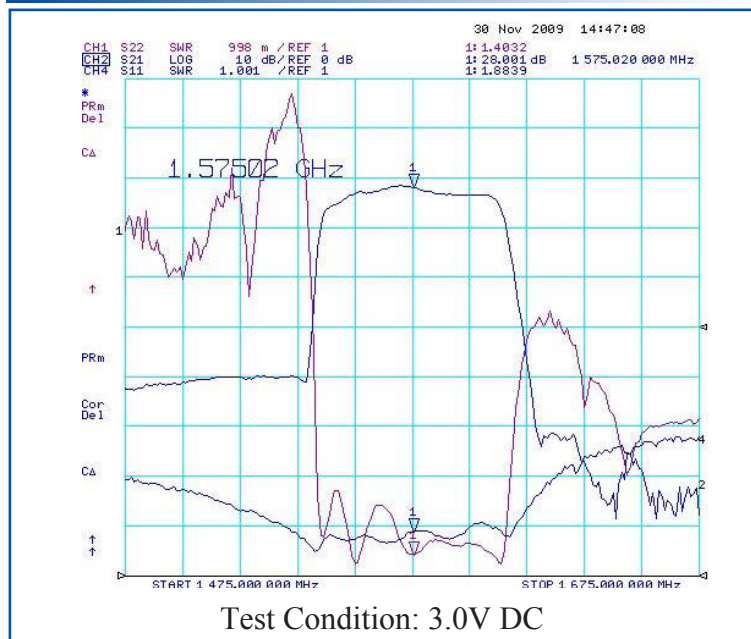
Low Noise Amplifier (LNA)

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1575.42± 1.02			MHz	
DC Voltage	2.50		3.50	V	
Gain		28		dB	(Without cable +25°C± 10°C)
Output VSWR		1.5			
Noise Figure		1.3			(+25°C± 10°C)
DC current		10.0		mA	(At 3.0V)

SMITH CHART



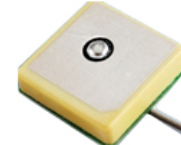
GPS LNA GAIN PLOT



GPS Active Internal Patch

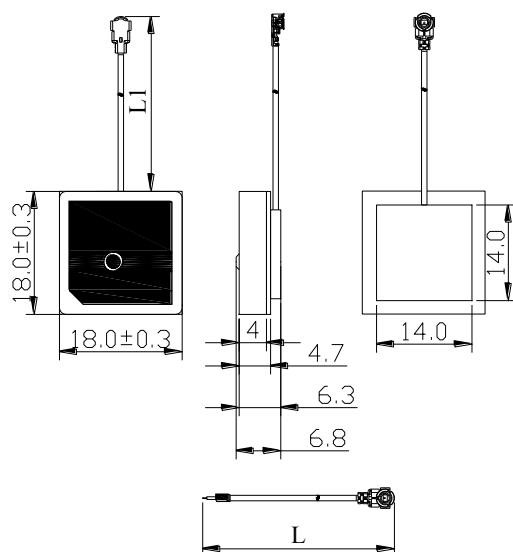
APAM1866YA18

RoHS/RoHS II compliant



18.0 x 18.0 x 7.0mm

OUTLINE DIMENSION:



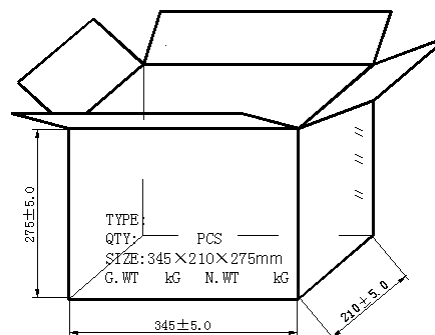
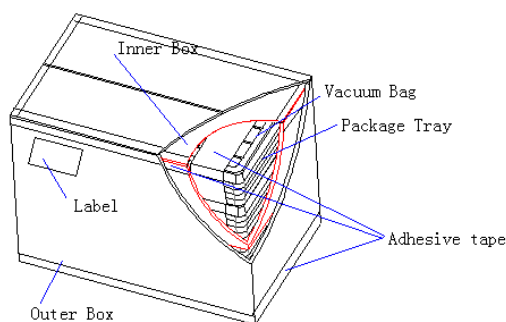
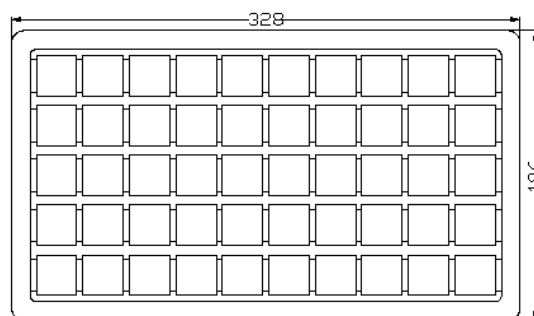
Tolerance: $\pm 0.2\text{mm}$

Description	Material
Antenna Type	Dielectric Ceramics
PCB	FR4
Shielding	Tinplate
RF Cable	9851SC0032-002, $\phi 1.13 \pm 0.1\text{mm}$, L1=200mm, L=205mm
RF Connector	I-PEX
Thickness	7.0mm (Max)

Unit: mm

PACKAGING

Package Type	Quantity
Tray	50 pcs/tray
Vacuum Bag	200pcs/box
Outer Box	1000 pcs/box



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 06.23.14**
30332 Esperanza, Rancho Santa Margarita, California 92688
tel 949-546-8000 | fax 949-546-8001 | www.abracon.com