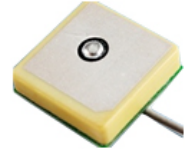


GPS Active Internal Patch

APAM1866YA18

RoHS/RoHS II compliant

MSL level: N/A



18.0 x 18.0 x 7.0mm

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:

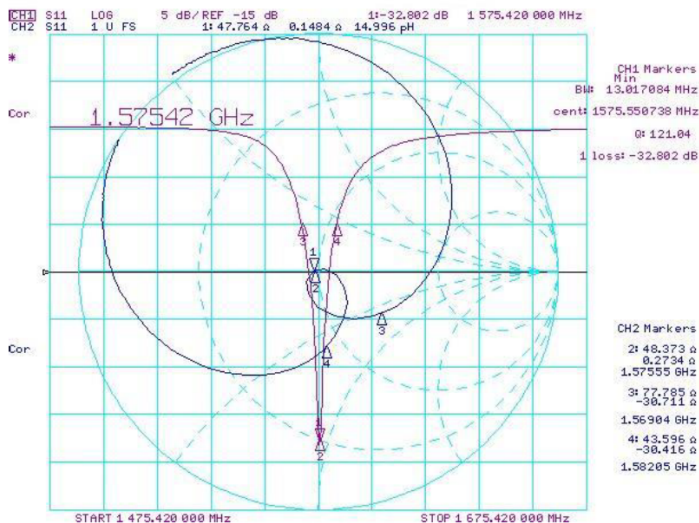
Antenna

Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1575.42± 1.023			MHz	
Bandwidth	8			MHz	
Gain		2.5		dBic	(Peak gain on 70*70mm Ground Plane facing Zenith.)
VSWR @ Center Frequency		2.0			
Polarization Model	RHCP				(Right Hand Circular Polarization)
Impedance	50			Ω	
Working Temperature	-40		+85	°C	
Storage Temperature	-40		+85	°C	

Low Noise Amplifier (LNA)

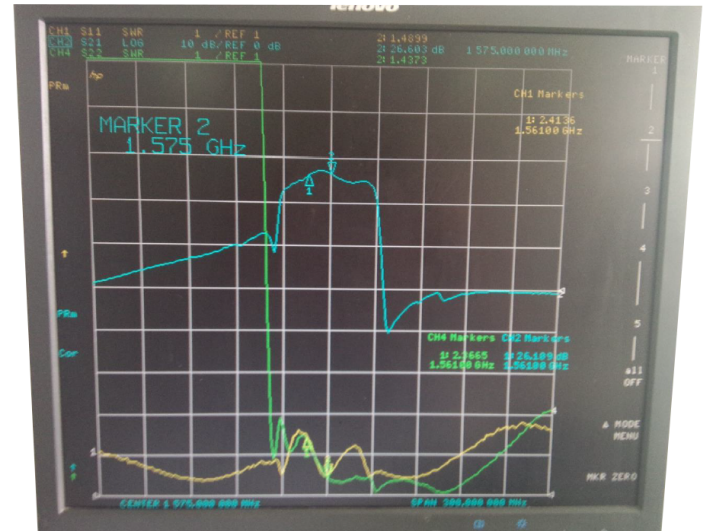
Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1575.42± 1.023			MHz	
DC Voltage	2.70	3.0	3.30	V	
Gain	24	27	30	dB	(Without cable +25°C± 10°C)
Output VSWR			2.0		
Noise Figure			2.0	dB	
DC current	11	13	15	mA	(At 3.0V)
Outband Rejection (Absolute value)	20			dB	f0 + 100 MHz
	30			dB	f0 - 100 MHz

SMITH CHART



Test Condition: 18x18mm Ground

GPS LNA GAIN PLOT

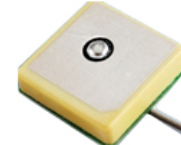


Test Condition: 3.0V DC

GPS Active Internal Patch

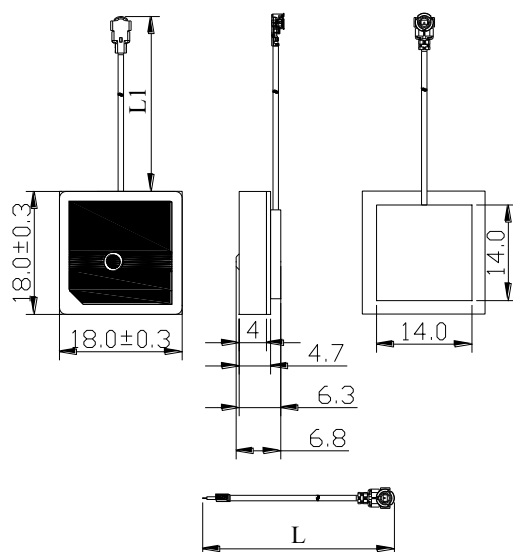
APAM1866YA18

RoHS/RoHS II compliant



18.0 x 18.0 x 7.0mm

OUTLINE DIMENSION:



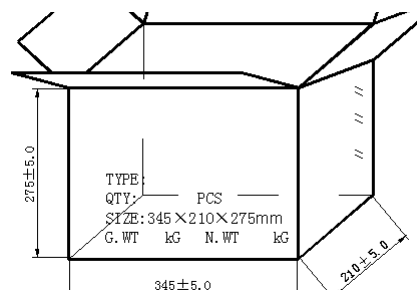
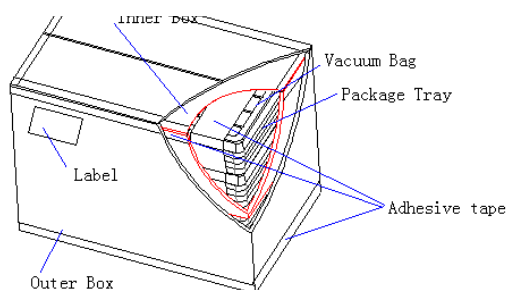
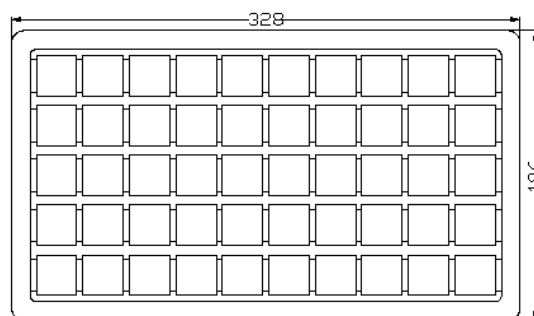
Description	Material
Antenna Type	Dielectric Ceramics
PCB	FR4
Shielding	Tinplate
RF Cable	$\phi 1.13 \pm 0.1 \text{ mm}$, $L1 = 200 \text{ mm} \pm 3 \text{ mm}$, $L = 205 \text{ mm} \pm 3 \text{ mm}$
RF Connector	I-PEX

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

Unit: mm

PACKAGING

Package Type	Quantity
MOQ	150 pcs
Tray	30 pcs/tray
Vacuum Bag	5 tray per Vacuum bag (150pcs per bag)
Outer Box	4 bags = 600 pcs/carton



ATTENTION: Abracon LLC'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 LLC is required. Please contact Abracon LLC for more information.