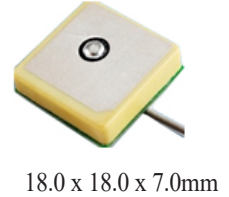


GPS Active Internal Patch

APAM1866YA18

RoHS/RoHS II compliant
MSL level: 1



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:

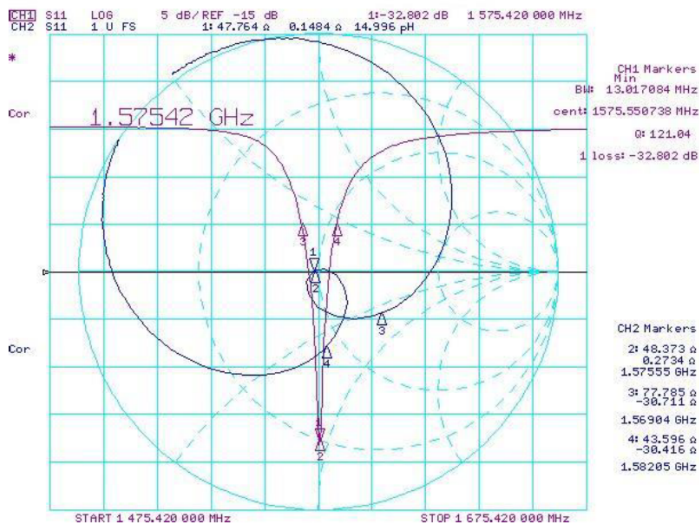
Antenna

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)

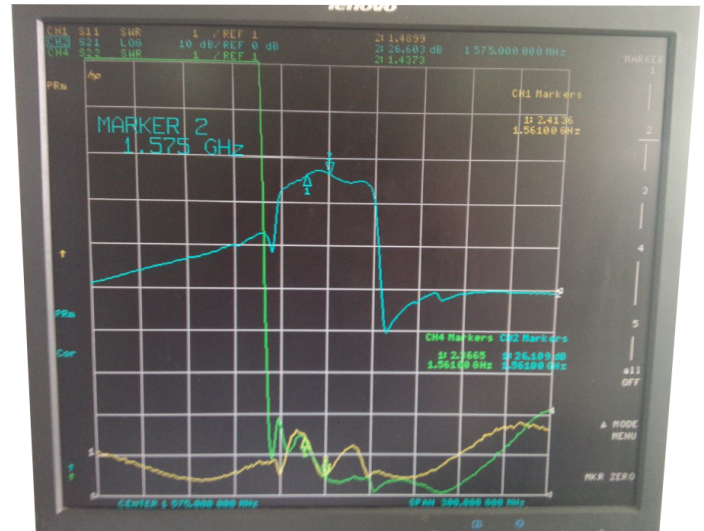
Parameters	Min.	Typ.	Max.	Units	Note
Center Frequency	1575.42±1.023			MHz	
DC Voltage	2.70	3.0	3.30	V	
Gain	24	27	30	dB	(Without cable +25°C± 10°C)
Output VSWR			2.0		
Noise Figure			2.0	dB	
DC current	11	13	15	mA	(At 3.0V)
Outband Rejection (Absolute value)	20			dB	f0 + 100 MHz
	30			dB	f0 - 100 MHz

SMITH CHART



Test Condition: 18x18mm Ground

GPS LNA GAIN PLOT



Test Condition: 3.0V DC

ABRACON[®]
The Heartbeat of the IoT™

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Phone: 512-371-6159 | Fax: 512-351-8858
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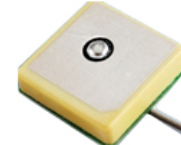
REVISED: 05.18.2018

ABRACON IS
ISO9001-2008
CERTIFIED

GPS Active Internal Patch

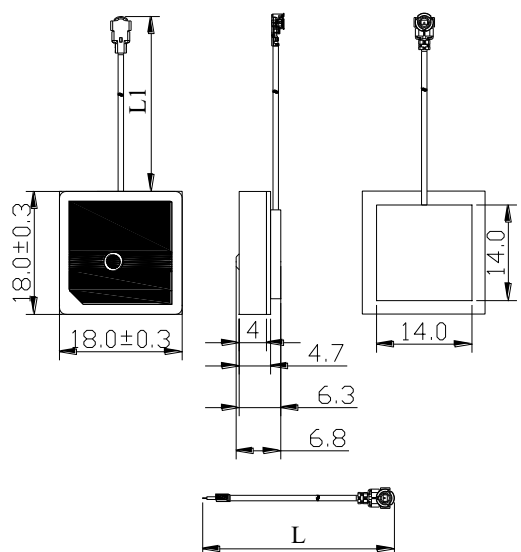
APAM1866YA18

RoHS/RoHS II compliant



18.0 x 18.0 x 7.0mm

OUTLINE DIMENSION:



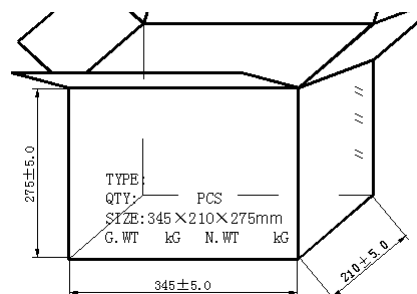
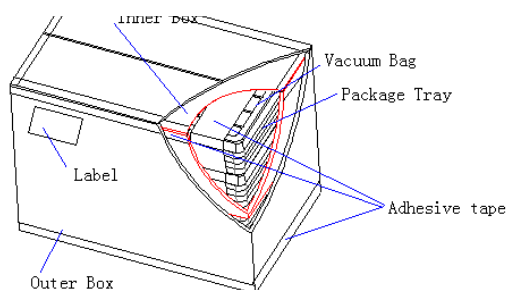
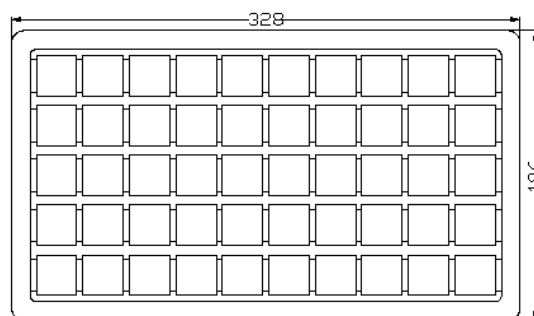
Description	Material
Antenna Type	Dielectric Ceramics
PCB	FR4
Shielding	Tinplate
RF Cable	$\phi 1.13 \pm 0.1 \text{ mm}$, $L1 = 200 \text{ mm} \pm 3 \text{ mm}$, $L = 205 \text{ mm} \pm 3 \text{ mm}$
RF Connector	I-PEX

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



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