

# GPS Active Internal Patch

## APAM1268JL02V2.0

RoHS/RoHS II compliant  
MSL level: N/A



### ► 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:

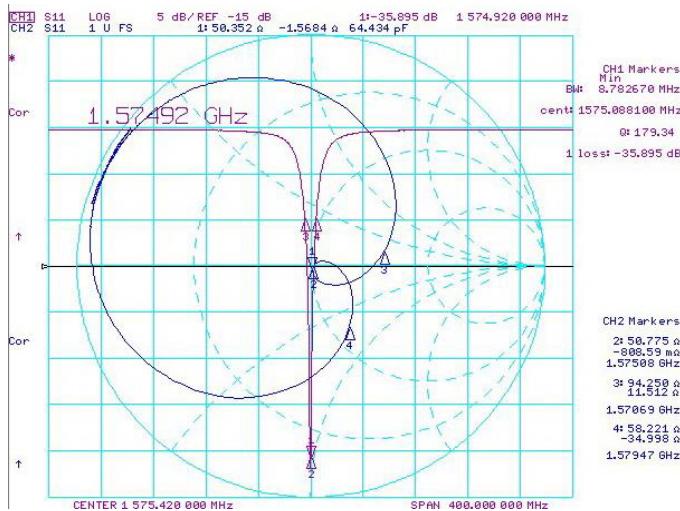
#### Antenna

| Parameters              | Min. | Typ.          | Max. | Units | Note                                               |
|-------------------------|------|---------------|------|-------|----------------------------------------------------|
| Center Frequency        |      | 1575.42± 1.02 |      | MHz   |                                                    |
| Bandwidth               | 5    |               |      | MHz   |                                                    |
| Gain                    |      | 0.0           |      | 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)

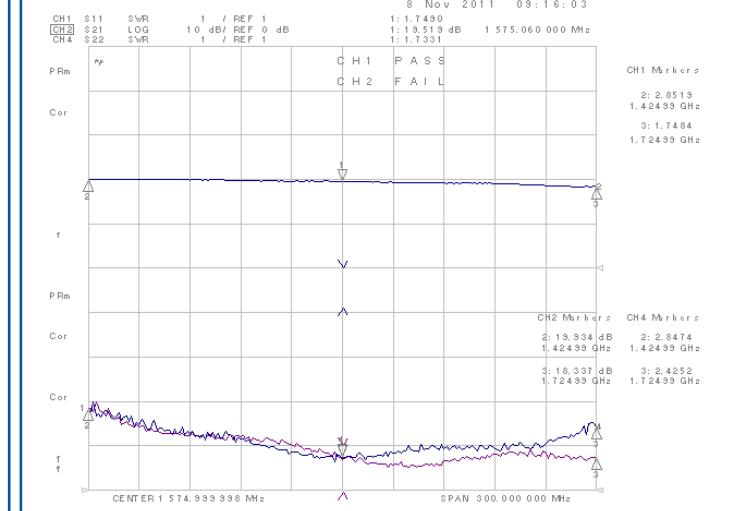
| Parameters       | Min. | Typ.          | Max. | Units | Note                        |
|------------------|------|---------------|------|-------|-----------------------------|
| Center Frequency |      | 1575.42± 1.02 |      | MHz   |                             |
| DC Voltage       | 2.70 |               | 3.30 | V     |                             |
| Gain             |      | 18            |      | dB    | (Without cable +25°C± 10°C) |
| Output VSWR      |      | 2.0           |      |       |                             |
| Noise Figure     |      | 1.5           |      |       | (+25°C± 10°C)               |
| DC current       |      | 3.5           |      | mA    | (At 3.0V)                   |

### ► SMITH CHART



Test Condition: 12x12mm Ground

### ► GPS LNA GAIN PLOT



Test Condition: 3.0V DC

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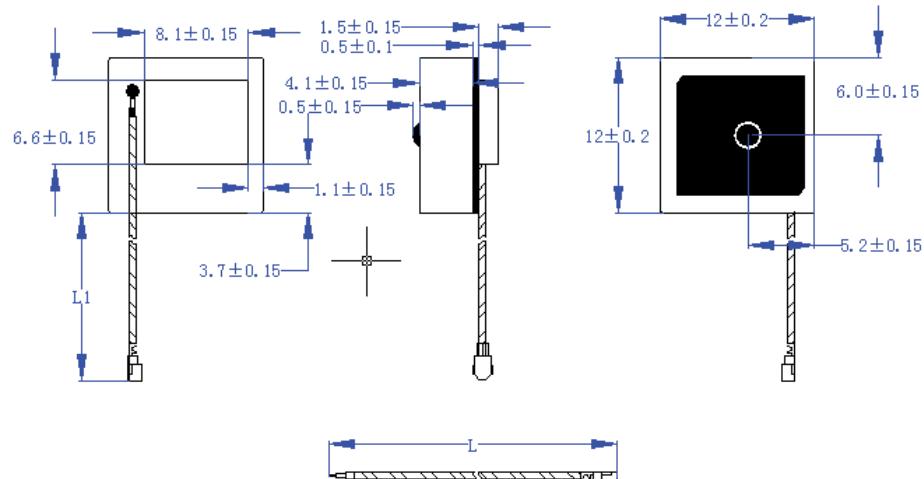
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12.0 x 12.0 x 6.8mm

## OUTLINE DIMENSION:

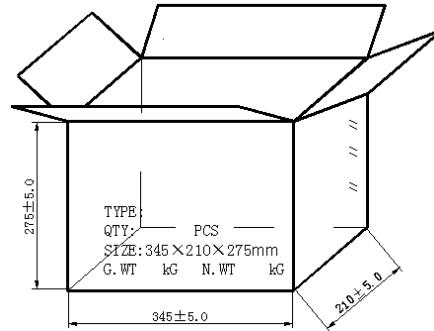
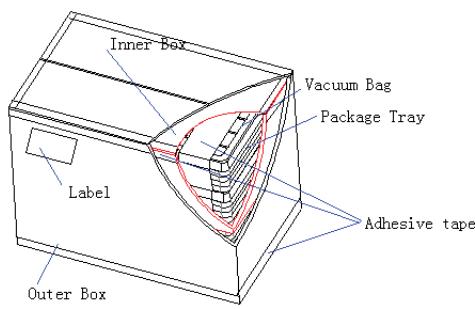
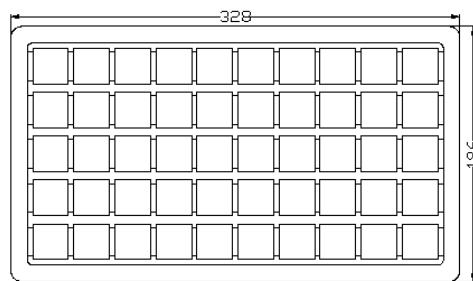


| Description  | Material                       |
|--------------|--------------------------------|
| Antenna Type | Dielectric Ceramics            |
| PCB          | FR4                            |
| Shielding    | Tinplate                       |
| RF Cable     | ø0.81±0.1mm, L1=13±2mm, L=22mm |
| RF Connector | I-PEX                          |
| Thickness    | 6.8mm Max                      |

Unit: mm

## PACKAGING:

| Package Type | Quantity                                |
|--------------|-----------------------------------------|
| MOQ          | 250 pcs                                 |
| Tray         | 50 pcs/tray                             |
| Vacuum       | 5 trays per Vacuum bag (250pcs per bag) |
| Outer Box    | 4 bags = 1000 pcs/carton                |



The GPS antenna 50 pcs are packed per tray, 5 trays are packed per vacuum bag, 4 vacuum bags per carton, and 1000 pcs GPS antenna per carton. The size of each carton is 345\*210\*275mm.

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