

GPS / WLAN Patch Antenna

APAEA1575R0940K14-T

RoHS/RoHS II compliant



9.0 x 9.0 x 4.0mm

MSL level: Not Applicable

FEATURES:

- Compact Size and Low Profile
- Pin type
- Customization Available
- RoHS Compliance

TYPICAL APPLICATIONS:

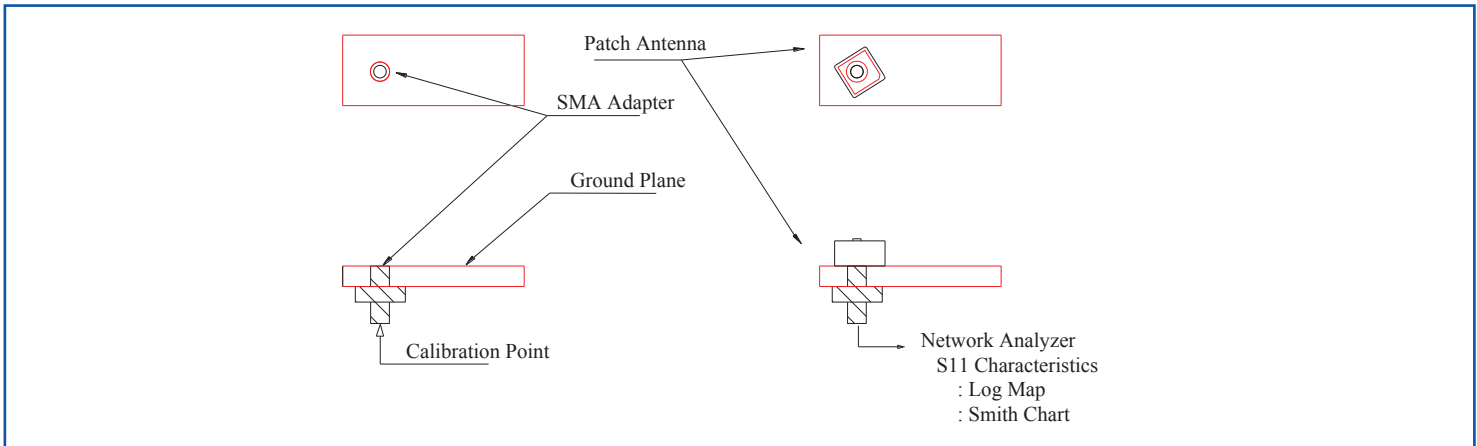
Automotive navigation, Marine buoys, Surveying equipment, Cell phone, Laptop, Healthcare and medical monitoring devices, PND, PDA

STANDARD SPECIFICATIONS:

| Parameters | Min. | Typ. | Max. | Units | Note |
|-----------------------------------|------|------|------|-------------------|---|
| Receiving Frequency Range | 1575 | | | MHz | |
| Center Frequency (*) | 1606 | | | MHz | (with JL03V2.0 GND Plane) |
| Bandwidth | 5 | | | MHz | (Return loss \leq 10dB) |
| Gain | | -1.0 | | dBic | (Peak gain on standardized Ground Plane facing Zenith.) |
| Axial Ratio | | | 5 | dB | |
| VSWR @ Center Frequency | | | 1.5 | | |
| Polarization Model | RHCP | | | | (Right Hand Circular Polarization) |
| Impedance | 50 | | | Ω | |
| Frequency Temperature Coefficient | -10 | | 10 | ppm/ $^{\circ}$ C | |

(*) Application environment, including size of the ground plane, proximity to adjacent components, etc., will affect stated performance. Fine tuning might be required when installed on end-customer's PCB. Abracon offers Antenna Optimization Service, please contact Abracon.

TEST CONDITIONS & TEST SETUP:



STRUCTURE AND MATERIAL

| Description | Material |
|-------------------|----------------------|
| Antenna Substrate | Dielectric Ceramics |
| Pin | Copper and tinplated |
| Electrode | Ag Plated |
| Ground Plane | Ag Plated |
| Adhesive Type | NITTO 5000NS |

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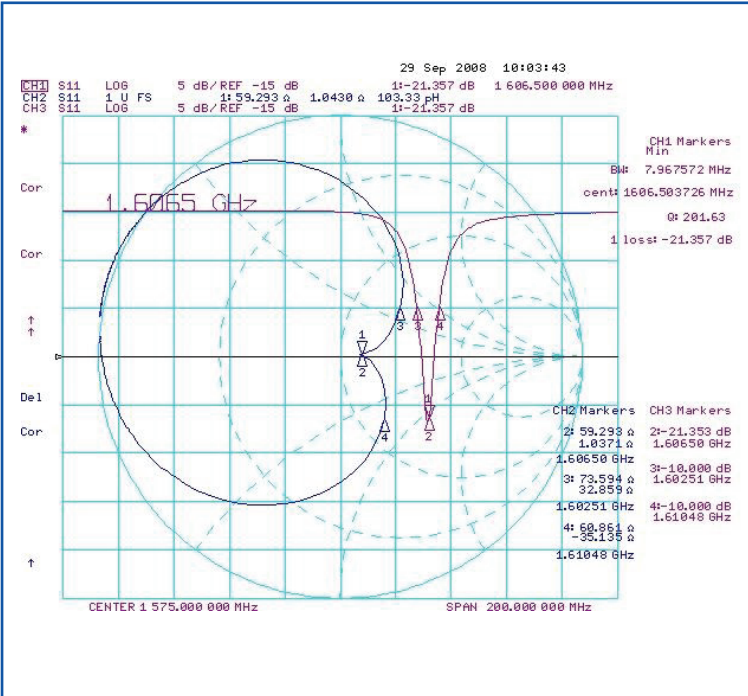
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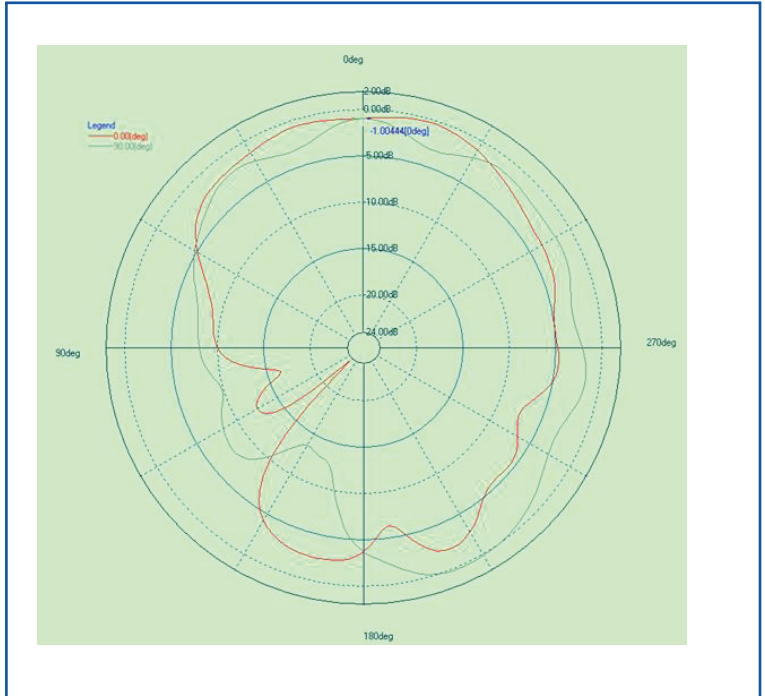


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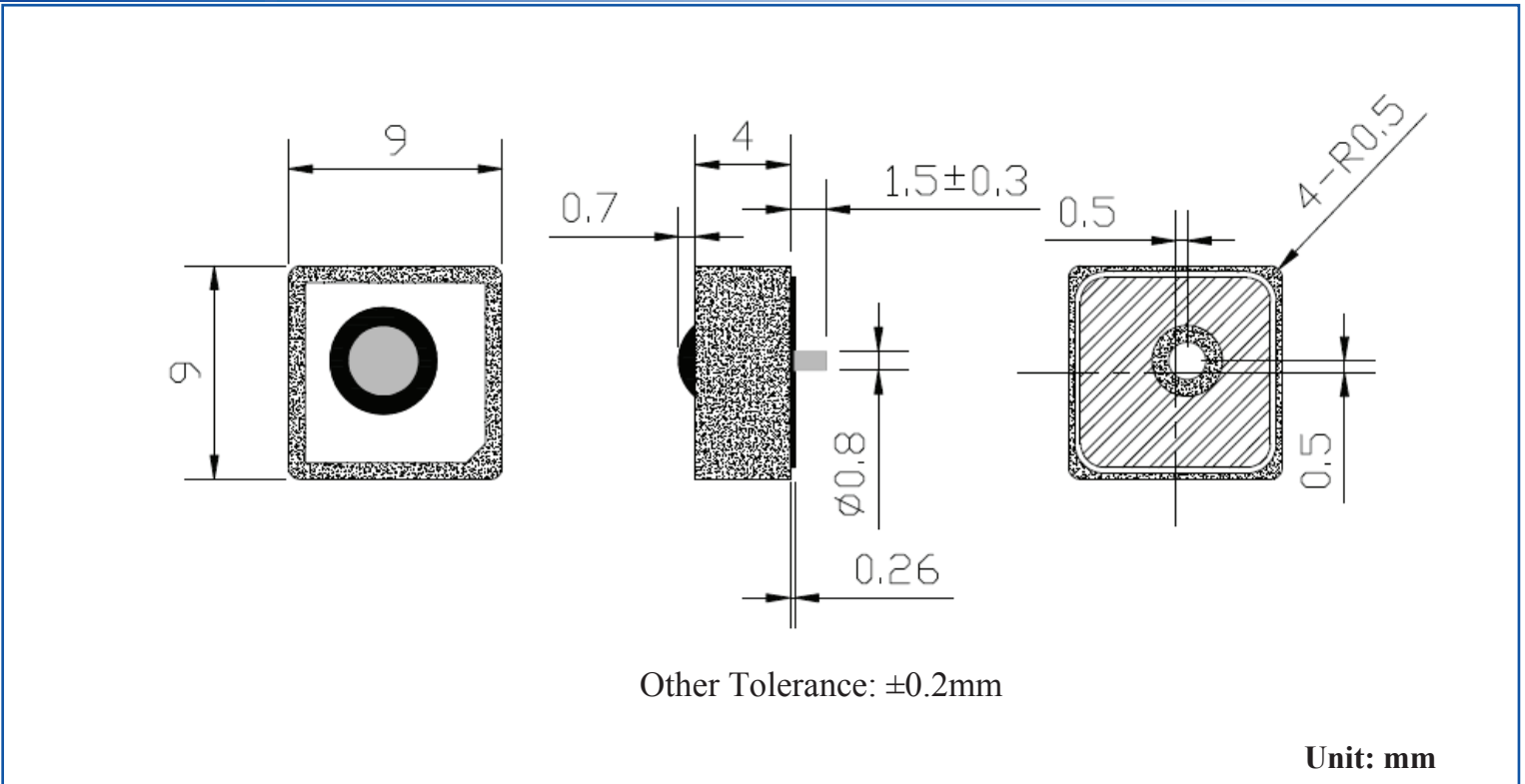
SMITH CHART



RADIATION PATTERN



OUTLINE DIMENSION:

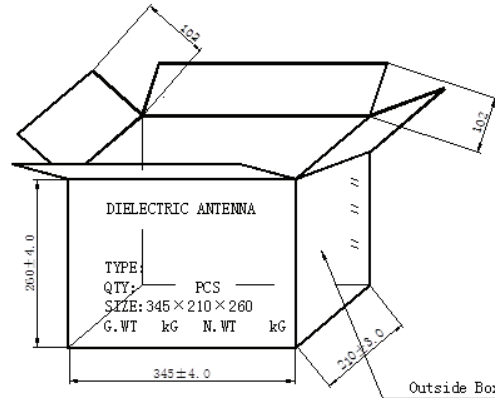
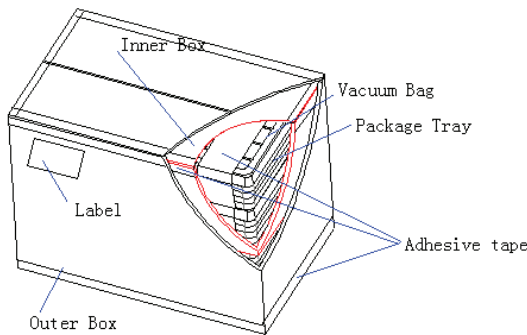
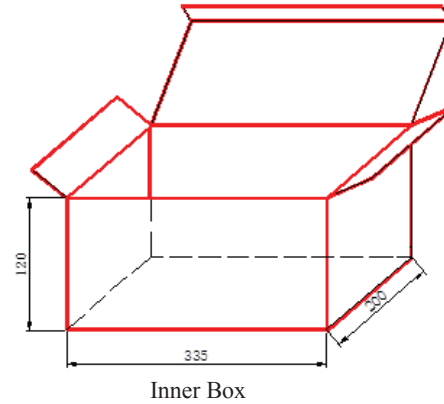
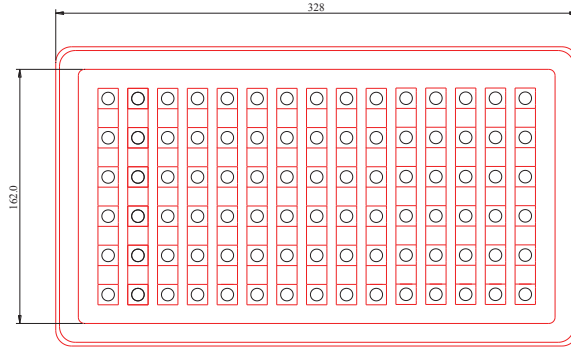




9.0 x 9.0 x 4.0mm

PACKAGING:

| Package Type | Quantity |
|--------------|--------------|
| Tray | 90 pcs/tray |
| Inner Box | 900 pcs/box |
| Outer Box | 1800 pcs/box |



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.

NOTE:

- 1) The parts are manufactured in accordance with this specification. If other conditions and specifications which are required for this specification, please contact ABRACON for more information.
- 2) ABRACON will supply the parts in accordance with this specification unless we receive a written request to modify prior to an order placement.
- 3) In no case shall ABRACON be liable for any product failure from in appropriate handling or operation of the item beyond the scope of this specification.
- 4) When changing your production process, please notify ABRACON immediately.
- 5) 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.
- 6) All specifications and Marking will be subject to change without notice.

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