1575.42MHZ; 25.0 x 25.0 x 2.0mm GPS Patch Antenna

APAE1575R2520ABDD7-T

RoHS/ RoHS II compliant



MSL level: Not Applicable

FEATURES:

- · High Gain
- 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:

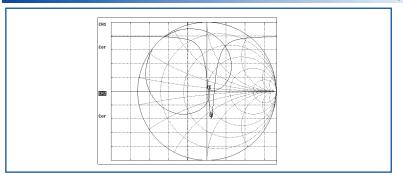
| Parameters | Min. | Тур. | Max. | Units | Note |
|---|---------------|-------|------|---------------------------------------|--|
| Receiving Frequency Range | 1575.42±1.023 | | | MHz | |
| Center Frequency @ -10dB bandwidth ^(*) | 1575±3.0 | | MHz | (on the special PCB ground plane) | |
| VSWR at Center Frequency | | | 1.5 | | |
| Gain (Zenith@90°) | | 4.3 | | dBic | (Peak gain on standardized Ground Plane.) |
| Impedance | | 50±10 | | Ω | |
| Polarization Model | RHCP | | | (Right Hand Circular Polarization) | |
| Frequency Temperature Coefficient | | | 20 | ppm/°C | |

^(*) Application environment, including size of ground plane will affect stated performance. Fine tuning might be required when installed on customer's PCB.

TEST CONDITIONS & TEST SETUP:

Parts shall be measured under a condition (Temp.: $20\pm15^{\circ}$ C, Humidity: $65\pm20\%$ R.H.) □ SMA

> IMPEDANCE CHARA



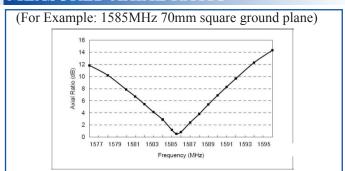
ABRACON IS

ISO9001:2008

CERTIFIED

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MEASURED AXIAL RATIO



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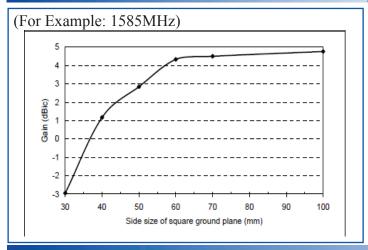
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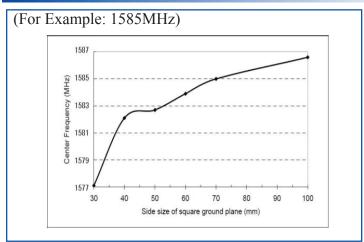
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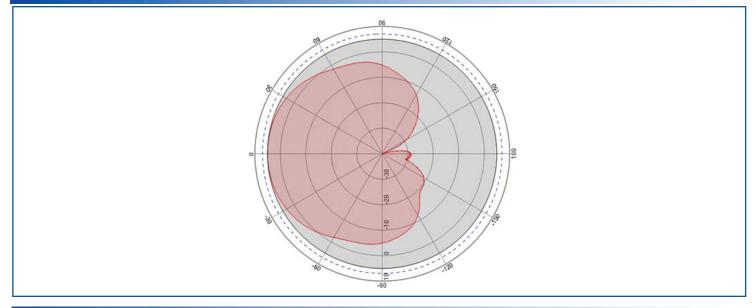
ANTENNA GAIN VS. GROUND PLANE SIZE

CENTER FREQUENCY VS. GROUND PLANE

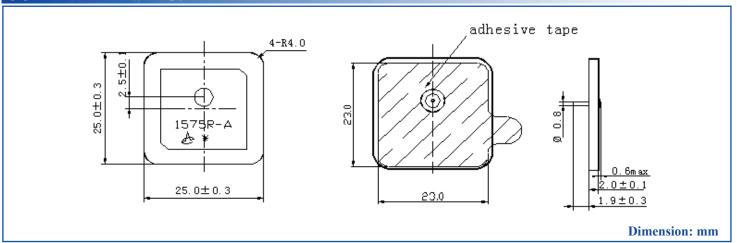




> THE NORMALIZED ANTENNA GAIN CHART



OUTLINE DRAWING:







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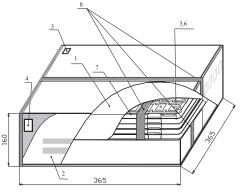
PACKAGING:

"T" is for a vacuum sealed tray containing 50 units.

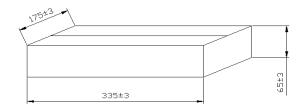
1000 pieces is the suggested quantity containing 20-trays with 50-pcs per Tray.

NOTE: This product is vacuum packaged to reduce the possibility of oxidation and/or contamination

during storage.



Inner Box dimensions (unit: mm)



| NO. | Name | | |
|-----|-------------------------|--|--|
| 1 | Inner Box | | |
| 2 | Package | | |
| 3 | Vacuum Bag | | |
| 4 | Certificate of approval | | |
| 5 | Label | | |
| 6 | Cushion | | |
| 7 | Tray | | |
| 8 | Adhesive tape | | |

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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