# 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:**

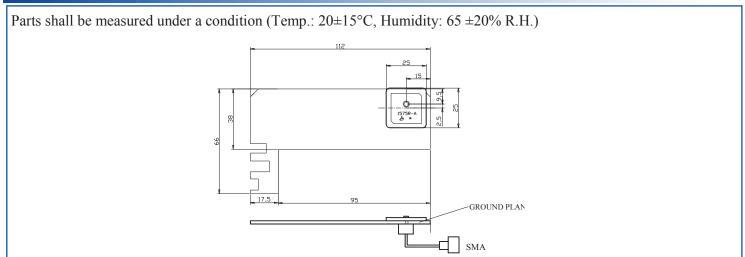
Automotive navigation, Marine buoys, Surveying equipment, Cell phone, Laptop, Healthcare and medical monitoring devices, PND, PDA

### > STANDARD SPECIFICATIONS:

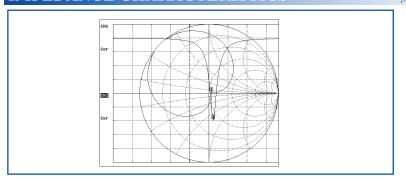
Parameters	Min.	Тур.	Max.	Units	Note
Receiving Frequency Range	1575.42±1.023			MHz	
Center Frequency @ -10dB bandwidth <sup>(*)</sup>	1575±3.0			MHz	(on the special PCB ground plane)
VSWR at Center Frequency			1.5		
Gain (Zenith@90°)		4.3		dBic	(Peak gain on standardized Ground Plane.)
Impedance		50±10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

<sup>(\*)</sup> 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:**



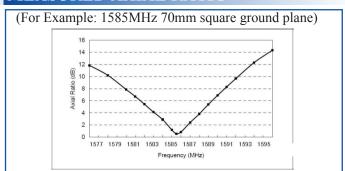
### > IMPEDANCE CHARACTERISTICS



#### ABRACON IS ISO9001:2008 CERTIFIED



### MEASURED AXIAL RATIO



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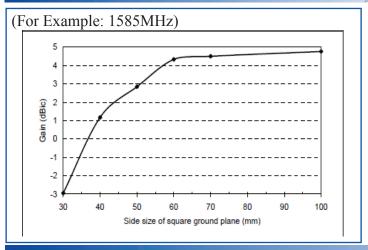
## **APAE1575R2520ABDD7-T**

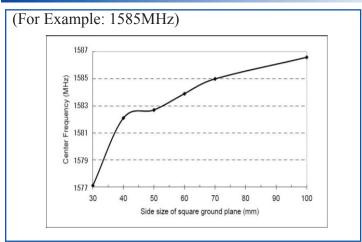
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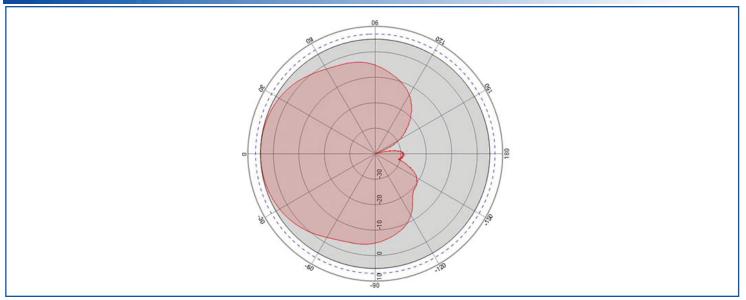
ANTENNA GAIN VS. GROUND PLANE SIZE



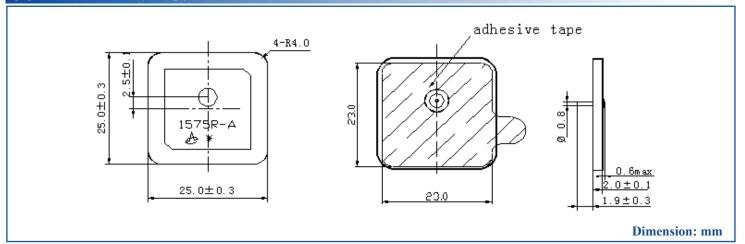




> THE NORMALIZED ANTENNA GAIN CHART



### **OUTLINE DRAWING:**







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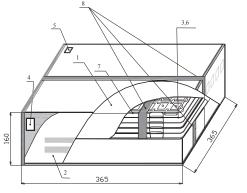
### **PACKAGING:**

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

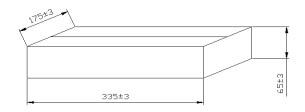
1000 pieces is the suggested quantity containing 20-trays with 50-pcs per Tray.

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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