

# 1575.42MHZ; 15x15x4mm GPS Patch Antenna



15.0 x 15.0 x 4.0mm

**APAE1575R1540AZDB2F-T**



**RoHS**  
Compliant

This product is RoHS compliant  
Pb in ceramic (exempt per RoHS 2002/95/EC Annex (7)).

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

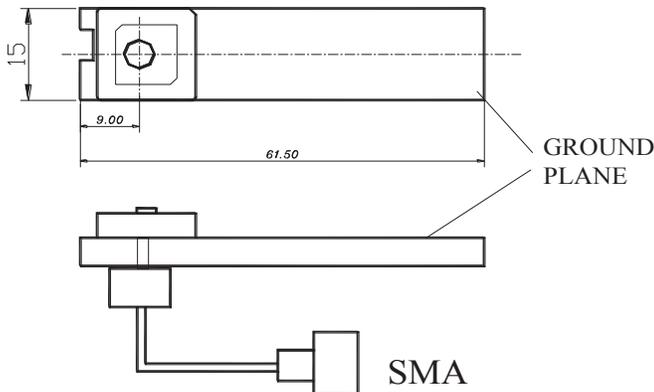
## STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Note
Receiving Frequency Range	1575.42±1.023			MHz	
Center Frequency @ -10dB bandwidth <sup>(*)</sup>	1577.0±5.0			MHz	(with tape on the 15mm x 61.5mm ground plane)
-10dB Bandwidth	5.0			MHz	
Gain (Zenith 90°)		1.2		dBic	(Peak gain on standardized Ground Plane.)
Return Loss at Center Frequency	-15			dB	
VSWR@ center Frequency			1.5		
Polarization Model	RHCP				(Right Hand Circular Polarization)
Impedance	50			Ω	
Frequency Temperature Coefficient			20	ppm/°C	

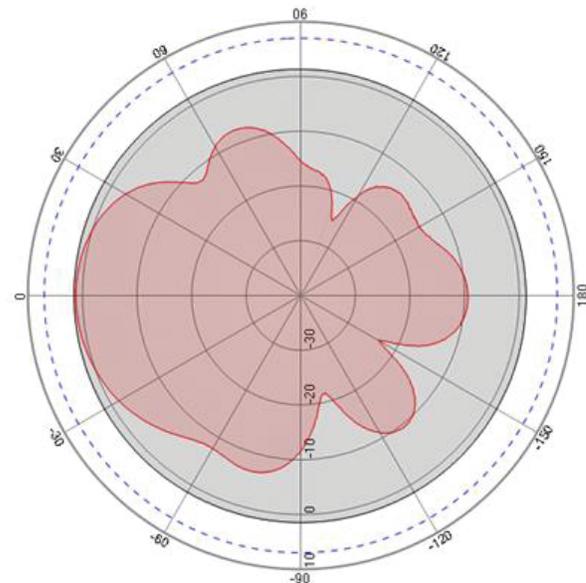
<sup>(\*)</sup>Application environment, including size of ground plane will affect stated performance. Fine tuning might be required when installed on customer's PCB.

## TEST CONDITIONS & TEST SETUP:

Parts shall be measured under a condition (Temp.: 20±15°C, Humidity: 65±20% R.H.)



## RADIATION PATTERN



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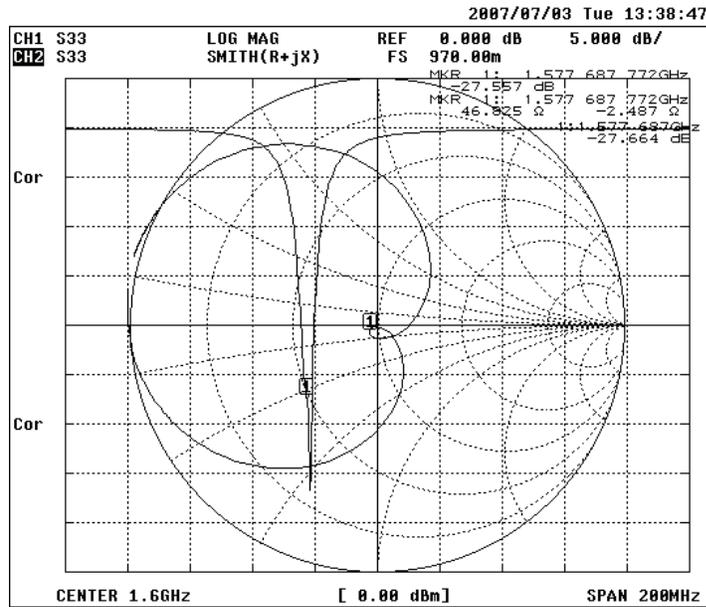
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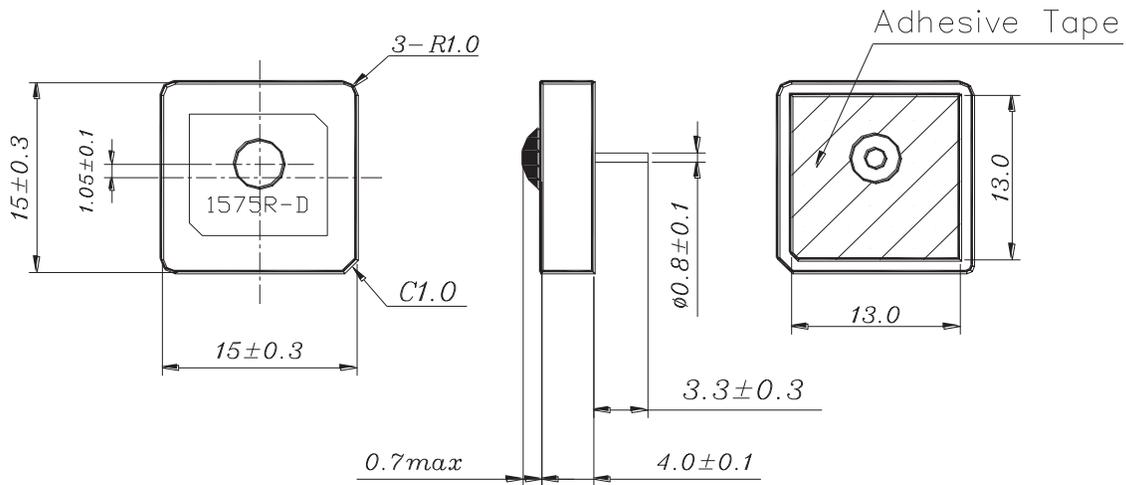
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## IMPEDANCE CHARACTERISTICS



## OUTLINE DRAWING:



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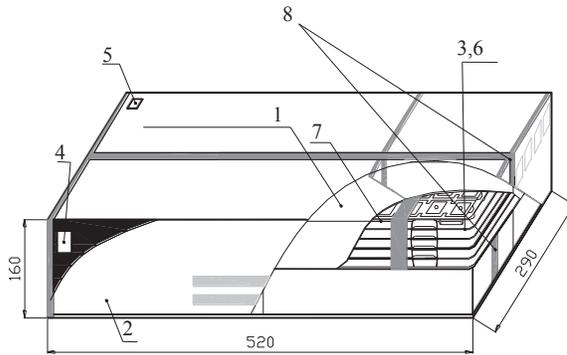
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## PACKAGING:

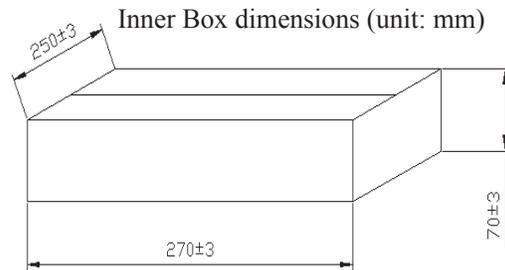
“T” is for a vacuum sealed tray containing 50 units.

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.



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



Inner Box dimensions (unit: mm)

## 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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ABRACON IS  
ISO9001:2008  
CERTIFIED



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