



**THE DATASHEET OF  
APAE1575R1840BADB1F-T**



# 1575.42MHZ; 18.0 x 18.0 x 4.0mm GPS Patch Antenna

**APAE1575R1840BADB1F-T**

RoHS/ RoHS II compliant



18.0 x 18.0 x 4.0mm

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

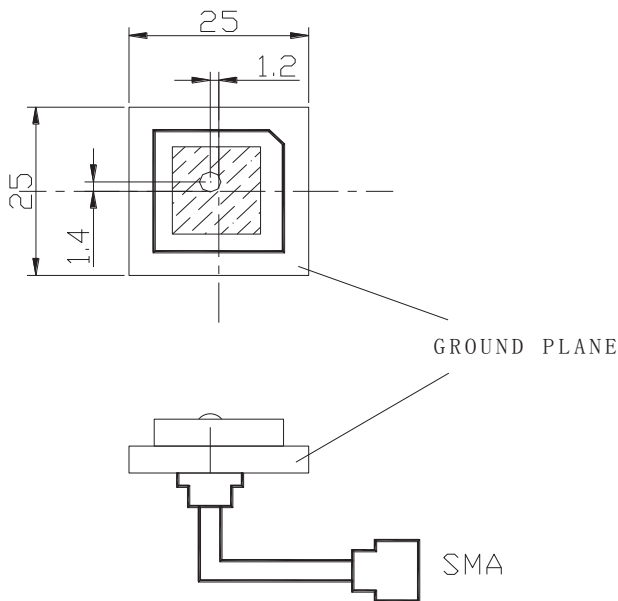
## STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Note
Receiving Frequency Range	1575.42±1.023			MHz	
Center Frequency @ -10dB bandwidth <sup>(*)</sup>	1560.5±2.5			MHz	(without adhesive tape on 25mm square ground plane)
-10dB Bandwidth	6			MHz	
Gain (Zenith@90°)		3.3		dBic	(Peak gain on standardized Ground Plane.)
VSWR at CF			1.5		
Impedance	50			Ω	
Polarization Model	RHCP				(Right Hand Circular Polarization)
Frequency Temperature Coefficient			20	ppm/°C	

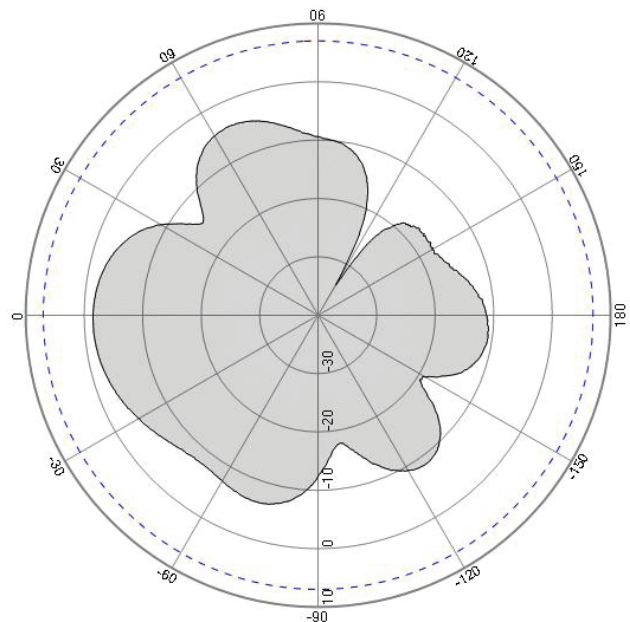
<sup>(\*)</sup> Application environment, including size of ground plane will affect stated performance. Fine tuning might be required when installed on customer's PCB.

## 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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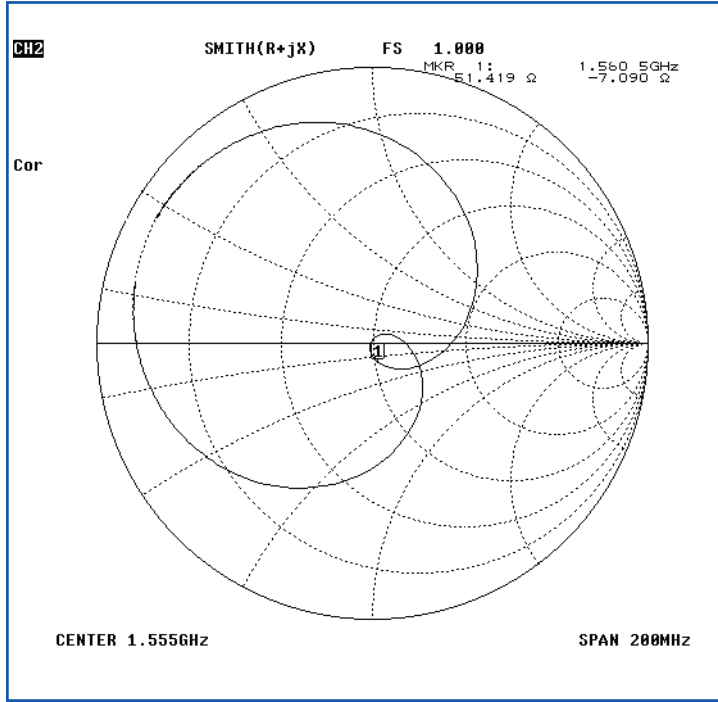
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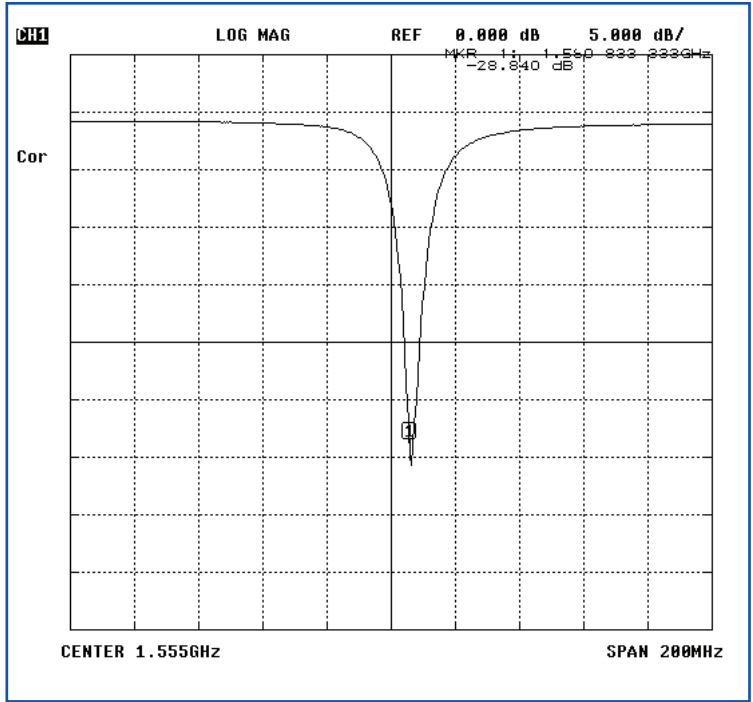


18.0 x 18.0 x 4.0mm

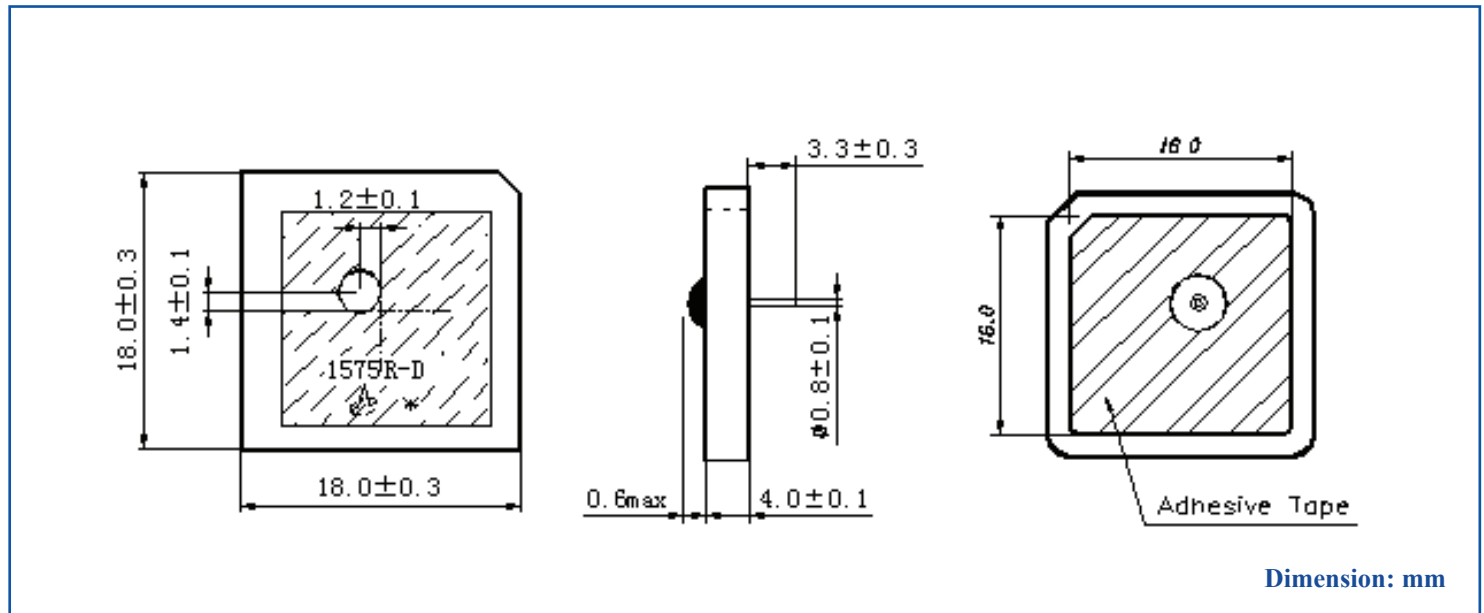
## IMPEDANCE CHARACTERISTICS



## RETURN LOSS



## OUTLINE DRAWING:



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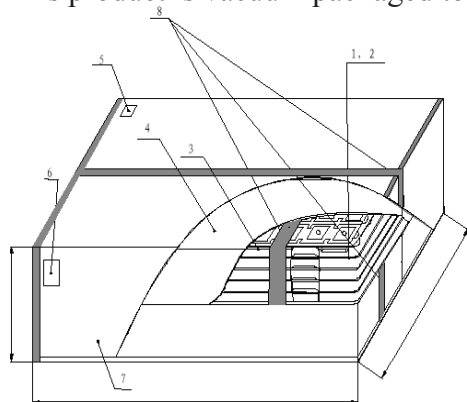
18.0 x 18.0 x 4.0mm

## PACKAGING:

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

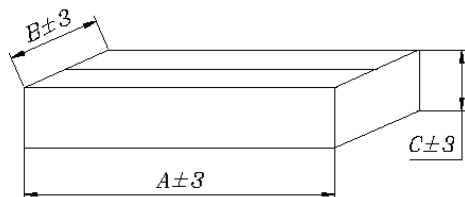
1000 pieces is the suggested quantity containing 20-trays with 50-pcs per Tray.

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



A: 335 B: 315 C: 190

Inner Box dimensions (unit: mm)



A: 285 B: 152 C: 65

NO.	Name
1	Cushion
2	Package
3	Vacuum Bag
4	Inner Box
5	Label
6	Certificate of approval
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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ABRACON IS  
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