

1575.42MHz/1598~1606MHz, 13 x 13 x 4mm

# GPS+GLONASS Patch Antenna



13.0 x 13.0 x 4.0mm

## APAE1590R1340AKDB2-T

RoHS/RoHS II Compliant

MSL level: Not Applicable

### FEATURES:

- High Gain
- Compact Size and Low Profile
- Pin type
- RoHS Compliance

### TYPICAL APPLICATIONS:

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

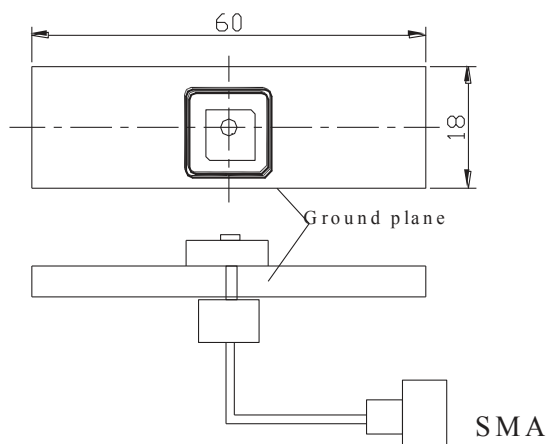
### STANDARD SPECIFICATIONS:

Parameters		Min.	Typ.	Max.	Units	Note
Center Frequency <sup>(*)</sup>	GPS	1575.42			MHz	(with adhesive tape on 18x60mm ground plane)
	GLONASS	1598~1606				
Return Loss at 1582MHz				-10	dB	
Return Loss at 1618MHz				-10	dB	
Axial Ratio			16			
RHCP Gain at Zenith 1575MHz				-2	dBic	(on 50× 50mm ground plane)
RHCP Gain at Zenith 1598~1606MHz				-2	dBic	(on 50× 50mm ground plane)
Polarization Model		RHCP				(Right Hand Circular Polarization)
Impedance		50			Ω	
Permittivity		91				
Frequency Temperature Coefficient				20	ppm/°C	

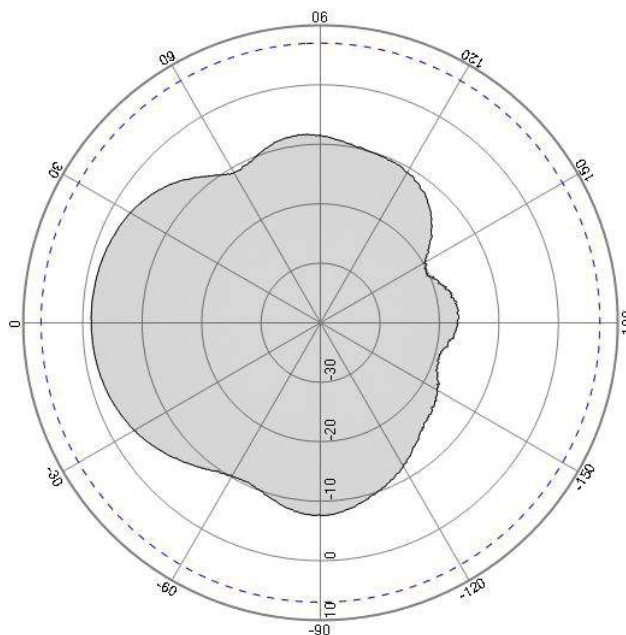
<sup>(\*)</sup>Application environment, including size of ground plane will affect stated performance. Fine tuning might be required when installed on customer's PCB.

### TEST CONDITIONS & TEST SETUP:

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



### RADIATION PATTERN



ABRACON IS  
ISO9001:2008  
CERTIFIED



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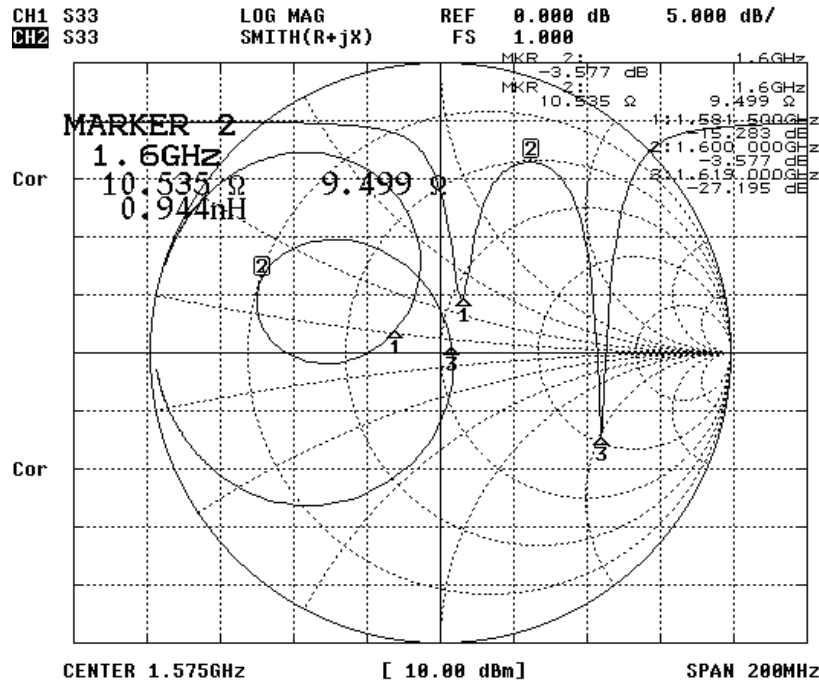
APAE1590R1340AKDB2-T

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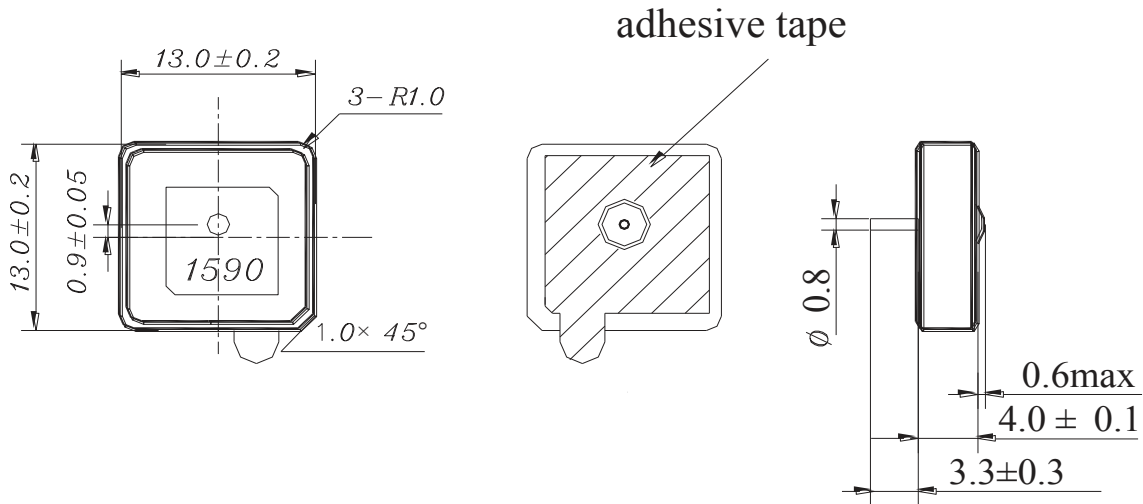


13.0 x 13.0 x 4.0mm

## IMPEDANCE CHARACTERISTICS



## OUTLINE DRAWING:



Dimension: mm



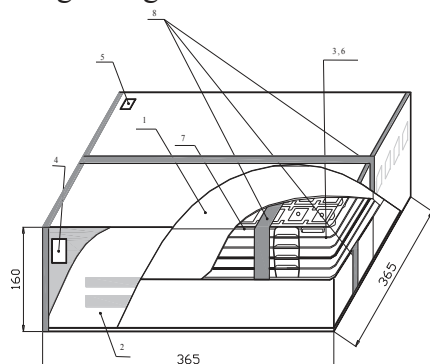
13.0 x 13.0 x 4.0mm

## PACKAGING:

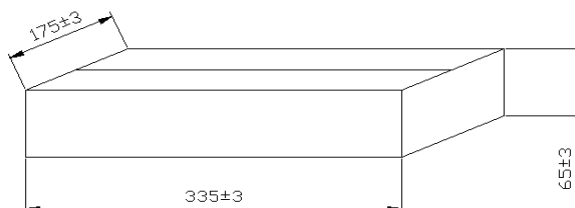
"T" is for a vacuum sealed tray containing 50 units.

2000 pieces is the suggested quantity containing 40-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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