

## Excellent Integrated System Limited

Stocking Distributor

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[Abracon Corporation](#)

[APAEA1575R0940K14-T](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

## GPS / WLAN Patch Antenna

APAEA1575R0940K14-T

RoHS/RoHS II compliant



9.0 x 9.0 x 4.0mm

MSL level: Not Applicable

## ► FEATURES:

- Compact Size and Low Profile
- Pin type
- Customization Available
- RoHS Compliance

## ► TYPICAL APPLICATIONS:

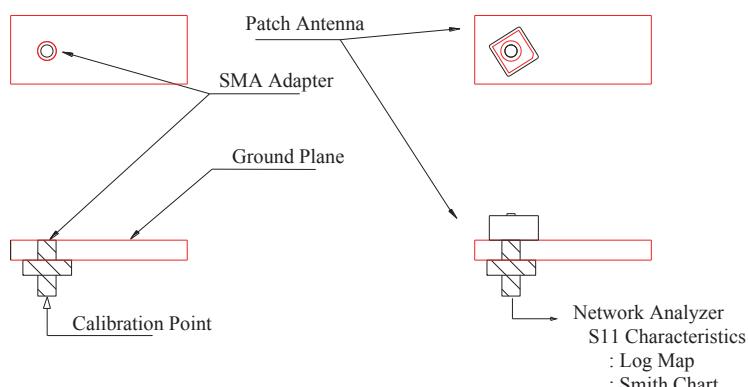
Automotive navigation, Marine buoys, Surveying equipment, Cell phone, Laptop, Healthcare and medical monitoring devices, PND, PDA

## ► STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Note
Receiving Frequency Range		1575		MHz	
Center Frequency (*)		1606		MHz	(with JL03V2.0 GND Plane)
Bandwidth	5			MHz	(Return loss $\leq$ 10dB)
Gain		-1.0		dBiC	(Peak gain on standardized Ground Plane facing Zenith.)
Axial Ratio			5	dB	
VSWR @ Center Frequency			1.5		
Polarization Model		RHCP			(Right Hand Circular Polarization)
Impedance		50		$\Omega$	
Frequency Temperature Coefficient	-10		10	ppm/ $^{\circ}$ C	

(\*) Application environment, including size of the ground plane, proximity to adjacent components, etc., will affect stated performance. Fine tuning might be required when installed on end-customer's PCB. Abraccon offers Antenna Optimization Service, please contact Abraccon.

## ► TEST CONDITIONS &amp; TEST SETUP:



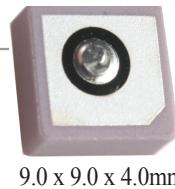
## ► STRUCTURE AND MATERIAL

Description	Material
Antenna Substrate	Dielectric Ceramics
Pin	Copper and tinplated
Electrode	Ag Plated
Ground Plane	Ag Plated
Adhesive Type	NITTO 5000NS

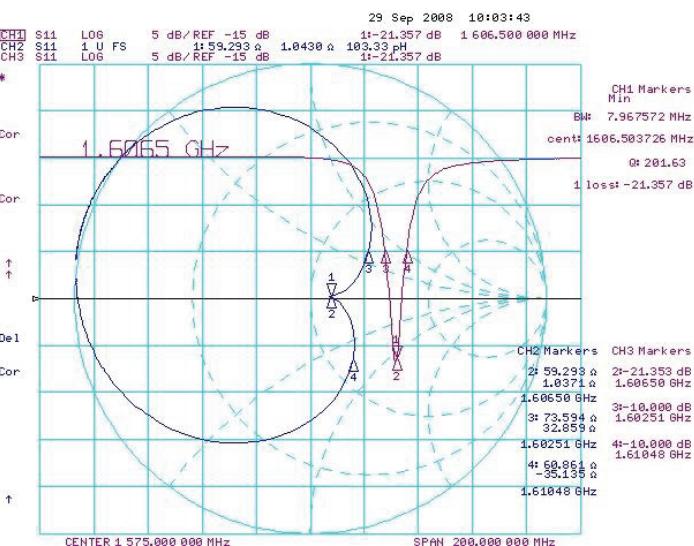
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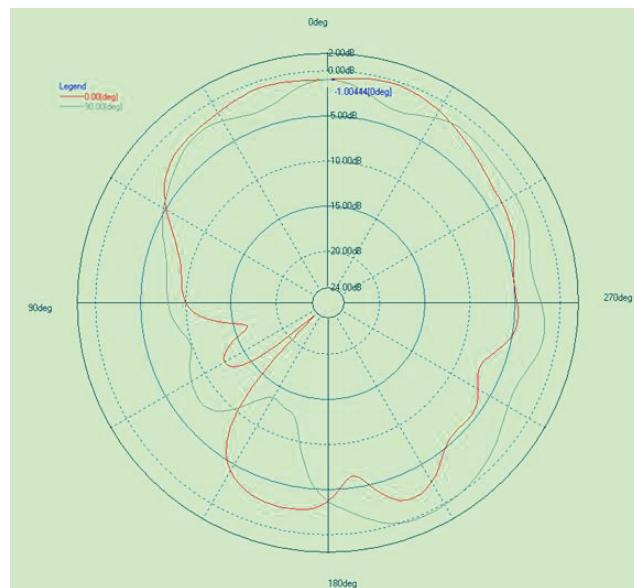
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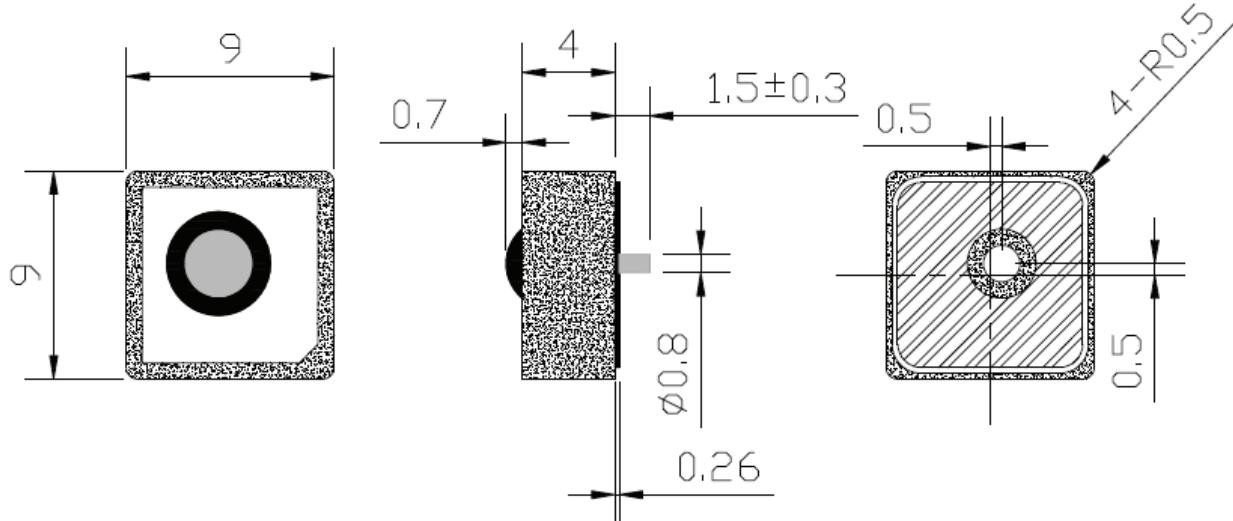
## SMITH CHART



## RADIATION PATTERN



## OUTLINE DIMENSION:

Other Tolerance:  $\pm 0.2\text{mm}$ 

Unit: mm

## GPS / WLAN Patch Antenna

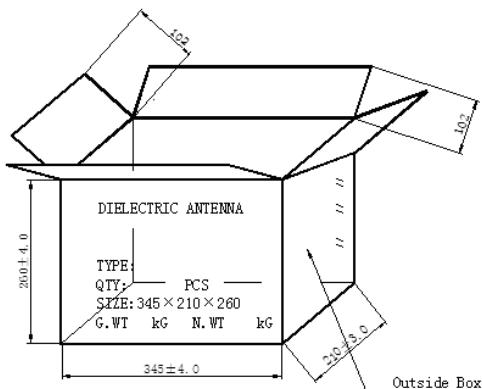
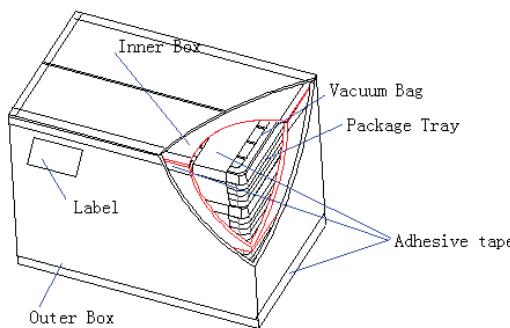
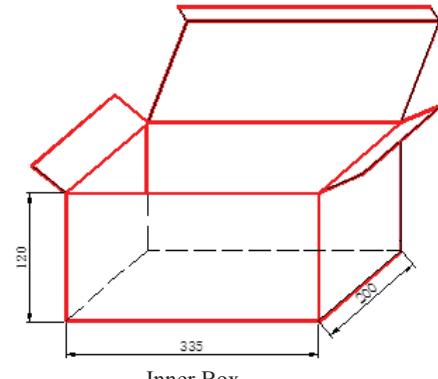
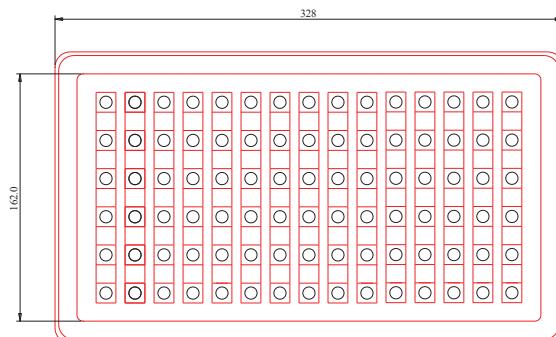
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## &gt; PACKAGING:

Package Type	Quantity
Tray	90 pcs/tray
Inner Box	900pcs/box
Outer Box	1800 pcs/box



## 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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