RFID Patch Antenna

APAES923R4560C16-T

RoHS/RoHS II compliant



MSL level: Not Applicable

FEATURES:

- High Gain
- Pin type
- Customization Available
- RoHS Compliance

> TYPICAL APPLICATIONS:

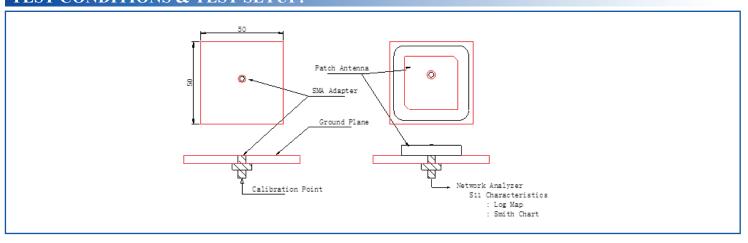
RFID systems for Logistic & Inventory Management of Retail, Pharmaceutical, Automotive Industries; Industrial automation, Contactless smart cards.

STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Note
Receiving Frequency Range	915		930	MHz	
Center Frequency ^(*)	923		MHz	(On 50*50mm GND Plane)	
Bandwidth	7			MHz	(Return loss ≤-10dB)
Gain		2.5		dBic	(Peak gain on (On 70*70mm GND Plane facing Zenith.)
Axial Ratio			2.5	dB	
VSWR @ Center Frequency			1.5		
Polarization Model	RHCP			(Right Hand Circular Polarization)	
Impedance	50		Ω		
Frequency Temperature Coefficient	-10		10	ppm/°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. Abracon offers Antenna Optimization Service, please contact Abracon.

> TEST CONDITIONS & 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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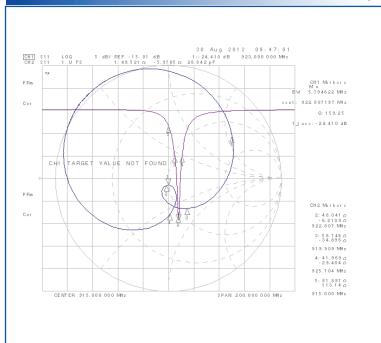
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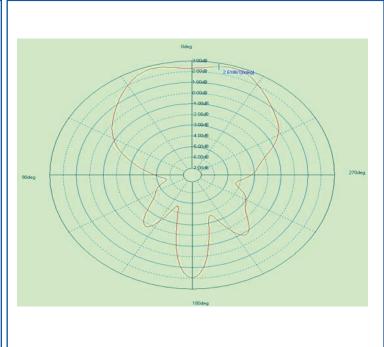
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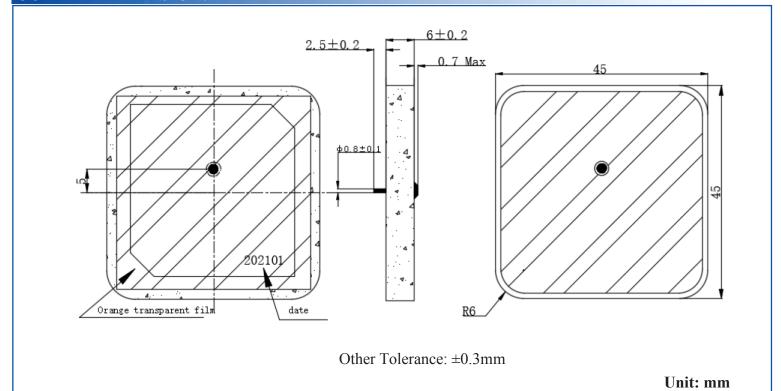
SMITH CHART

► RADIATION PATTERN





OUTLINE DIMENSION:







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Outside Box

PACKAGING:

Package Type Tray Inner Box Outer Box	Quantity 15 pcs/tray 150 pcs/box 300 pcs/box	\$\frac{1}{8}\$
		DIELECTRIC ANTENNA

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.

Inner Box

- (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 specifica-
- 4) When changing your production process, please notify ABRACON immediately.

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- 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. 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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| Fax: 512-351-8858

TYPE QTY;

PCS. $SXZE: 345 \times 210 \times 260$ kG N. WT

345 ± 4.0