

RFID Patch Antenna

APAES915R80C16-T

RoHS/RoHS II compliant



80.0 x 80.0 x 6.0mm

MSL level: Not Applicable

FEATURES:

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

TYPICAL APPLICATIONS:

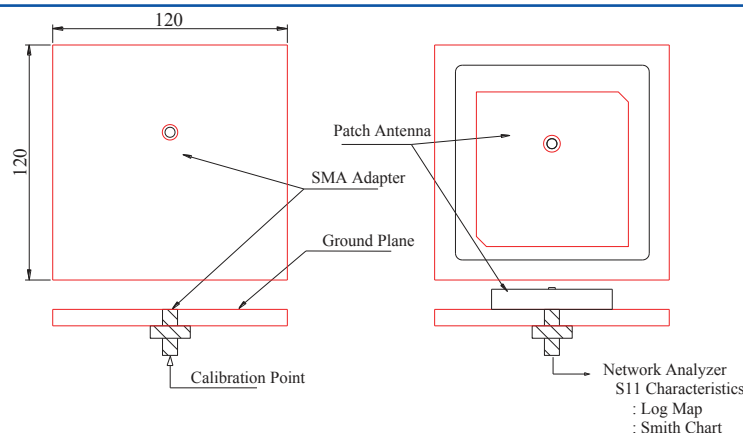
RFID systems for Logistic & Inventory Management of Retail, Pharmaceutical, Automotive Industries; Industrial automation, Contactless smart cards.

STANDARD SPECIFICATIONS:

| Parameters | Min. | Typ. | Max. | Units | Note |
|-----------------------------------|-------|------|-------|-------------------|--|
| Receiving Frequency Range | 902.0 | | 928.0 | MHz | |
| Center Frequency (*) | 915 | | | MHz | (On a 120*120mm Ground Plane) |
| Bandwidth | 20 | | | MHz | (Return loss \leq 10dB) |
| S11@ Center Frequency | | | -20 | dB | |
| Gain | | 5.0 | | dBic | (Peak gain on 120*120mm Ground Plane facing Zenith.) |
| Axial Ratio | | | 3 | dB | |
| VSWR @ Center Frequency | 1.3 | | | | |
| Polarization Model | RHCP | | | | (Right Hand Circular Polarization) |
| Impedance | 50 | | | Ω | |
| 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. 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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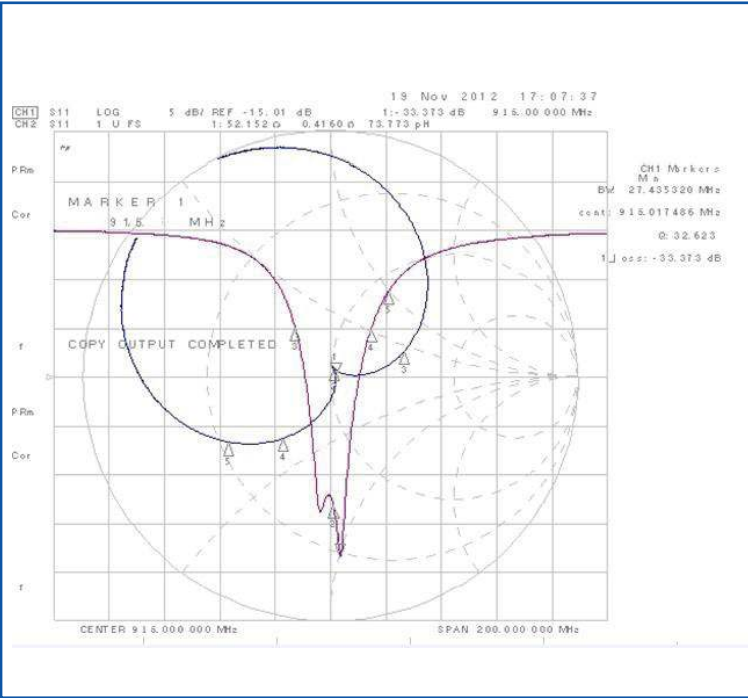
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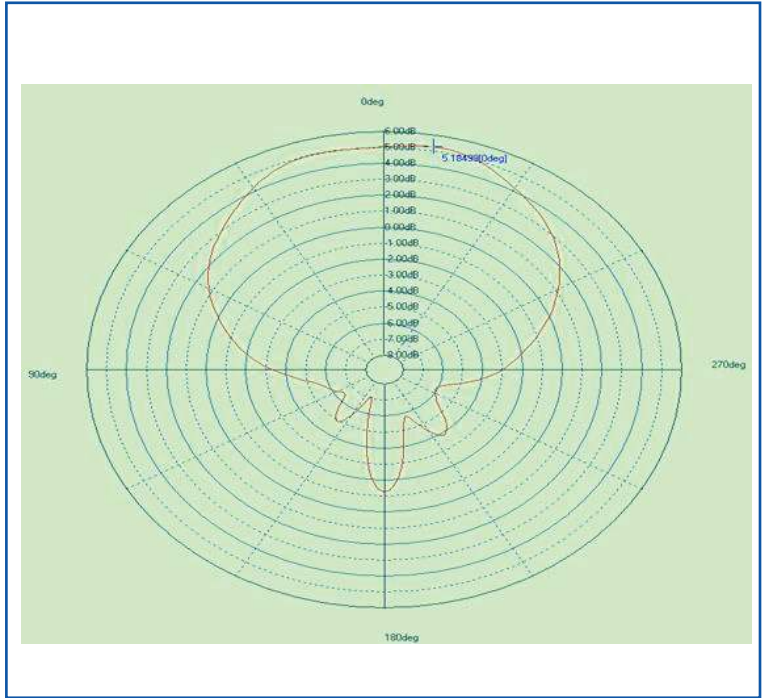


80.0 x 80.0 x 6.0mm

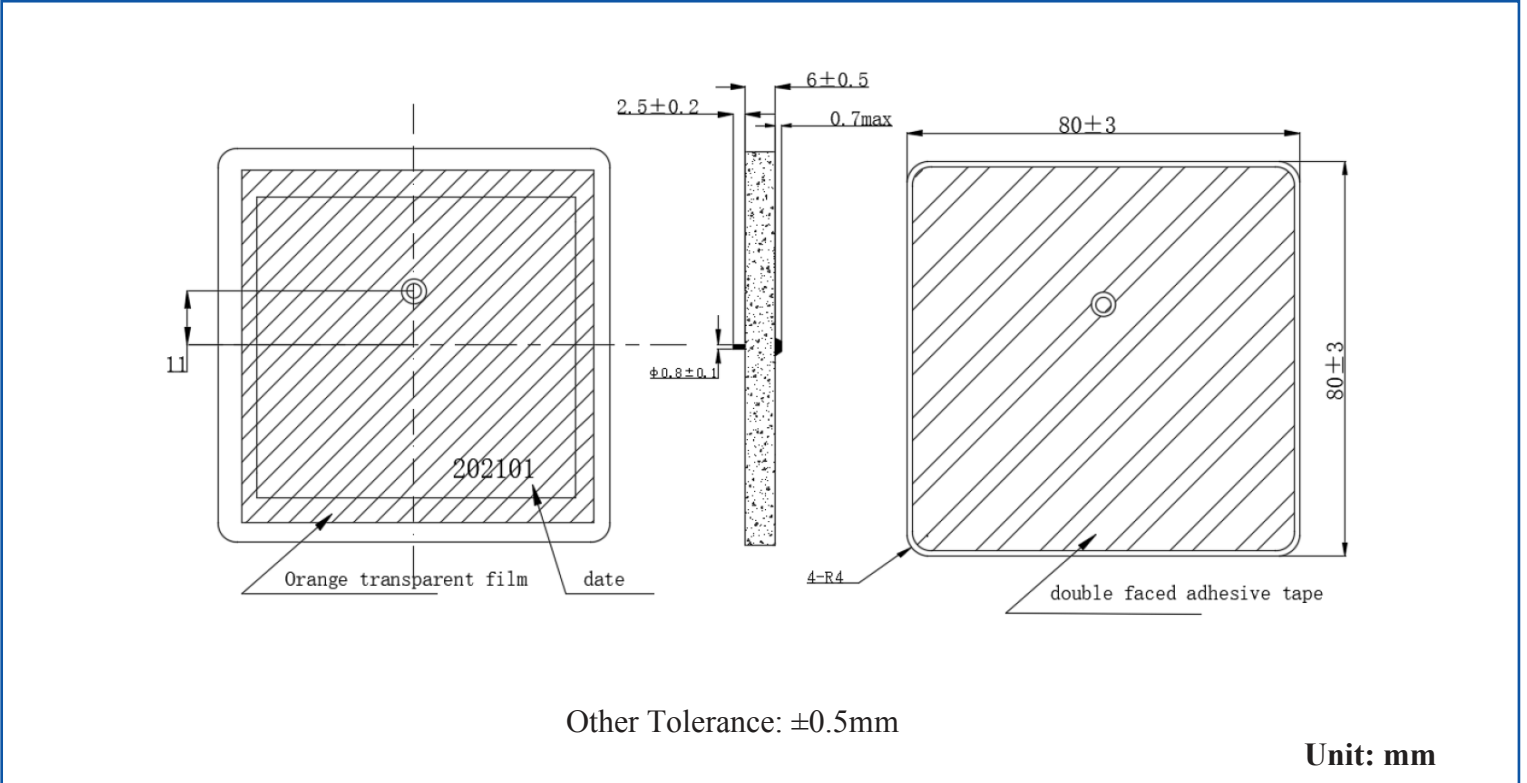
SMITH CHART



RADIATION PATTERN



OUTLINE DIMENSION:



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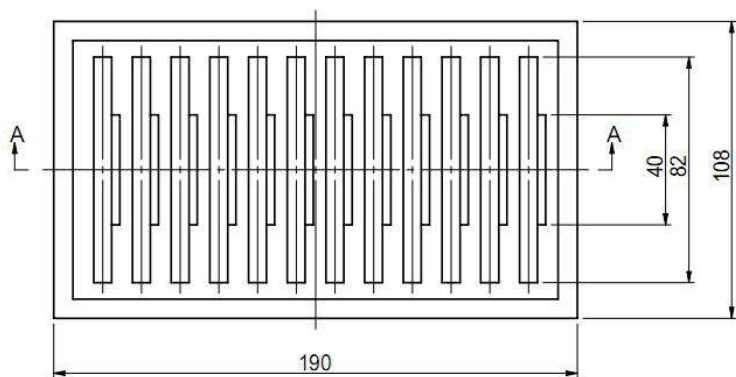
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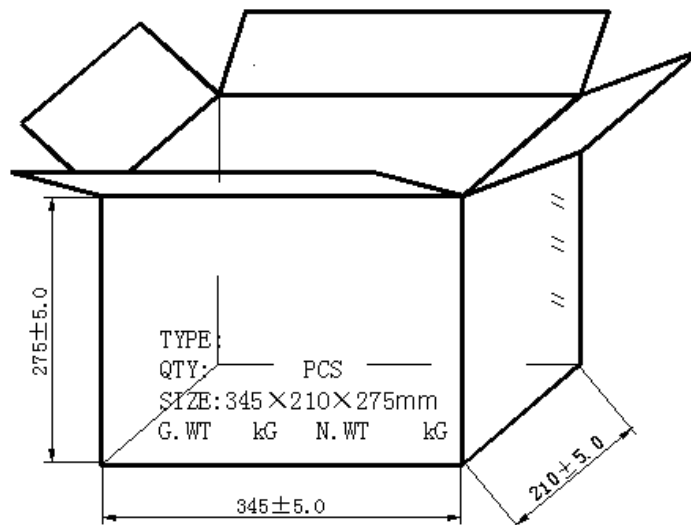
80.0 x 80.0 x 6.0mm

PACKAGING:

Each foam box contains 12pcs of RFID patch antenna. There are 3 foam boxes per inner box, and 2 inner boxes per carton (Outer box).



Foam Box



Outer Box

| Package Type | Quantity |
|--------------|------------------|
| Foam Box | 12 pcs/foam box |
| Inner Box | 36 pcs/inner box |
| Outer Box | 72 pcs/outer 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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ABRACON IS
ISO9001-2015
CERTIFIED



REVISED: 07/19/2021

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