

# 868MHz; 25 x 25 x 4mm RFID(EU) Patch Antenna

**APAE868R2540JBDB2-T**

RoHS/ RoHS II compliant



25.0 x 25.0 x 4.0mm

MSL level: Not Applicable

## FEATURES:

- Compact size
- RoHS Compliance

## TYPICAL APPLICATIONS:

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

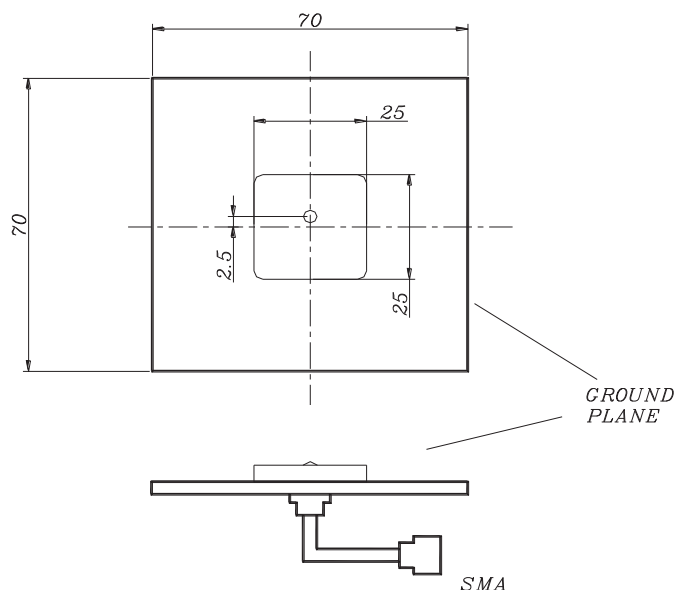
## STANDARD SPECIFICATIONS:

Parameters	Min.	Typ.	Max.	Units	Note
Nominal Frequency		868.0		MHz	
Center Frequency @ -10dB bandwidth <sup>(*)</sup>		868.0±2.0		MHz	(Without adhesive tape on 70x70mm ground plane)
-10dB bandwidth	2.5			MHz	
Gain ( at Zenith 90°)		-1.37		dBic	(Peak gain on standard 70x70mm Ground Plane.)
VSWR at Center Frequency			1.5		
Polarization Model		RHCP			(Right Hand Circular Polarization)
Impedance		50		$\Omega$	
Frequency Temperature Coefficient			20	ppm/°C	

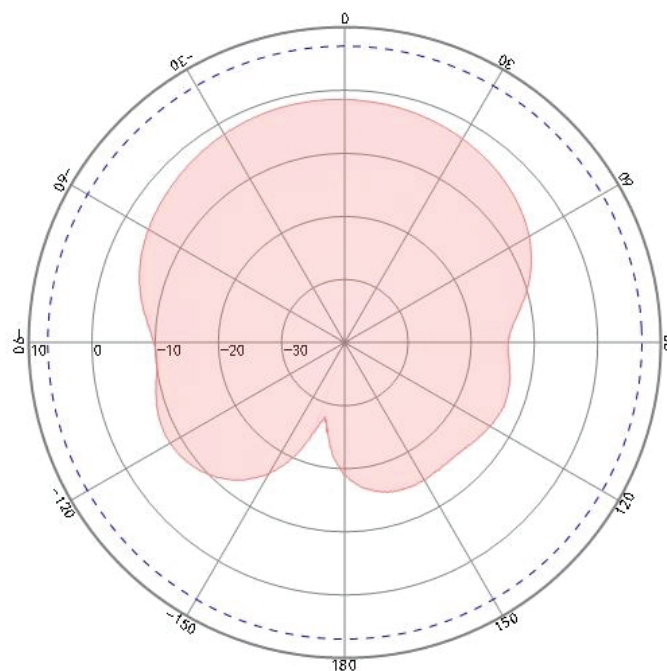
<sup>(\*)</sup>Application environment, including size of ground plane will affect stated performance. Fine tuning might be required when installed on customer's PCB.

## TEST CONDITIONS & TEST SETUP:

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



## RADIATION PATTERN



# 868MHz; 25 x 25 x 4mm RFID(EU) Patch Antenna

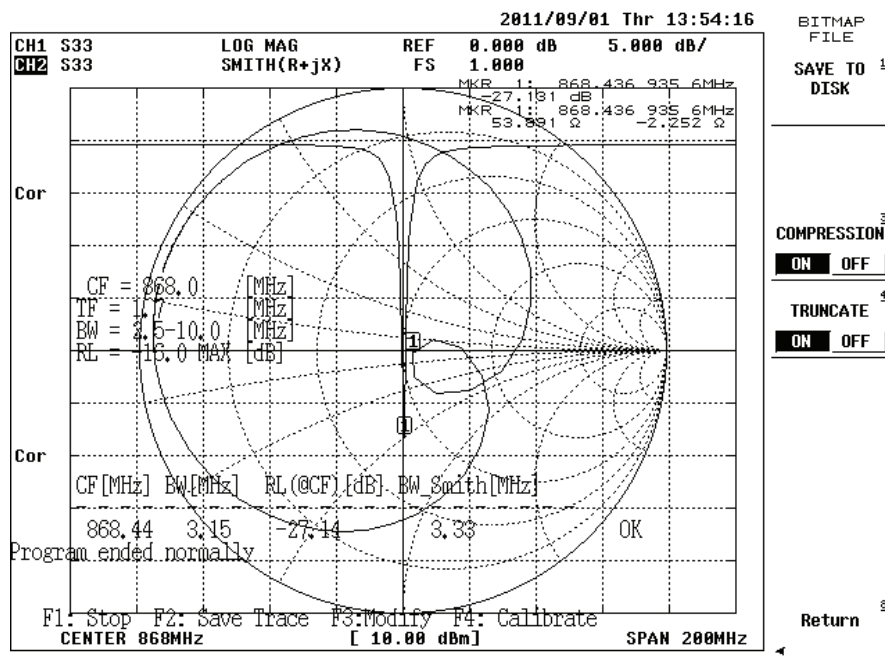
APAE868R2540JBDB2-T

RoHS/ RoHS II compliant

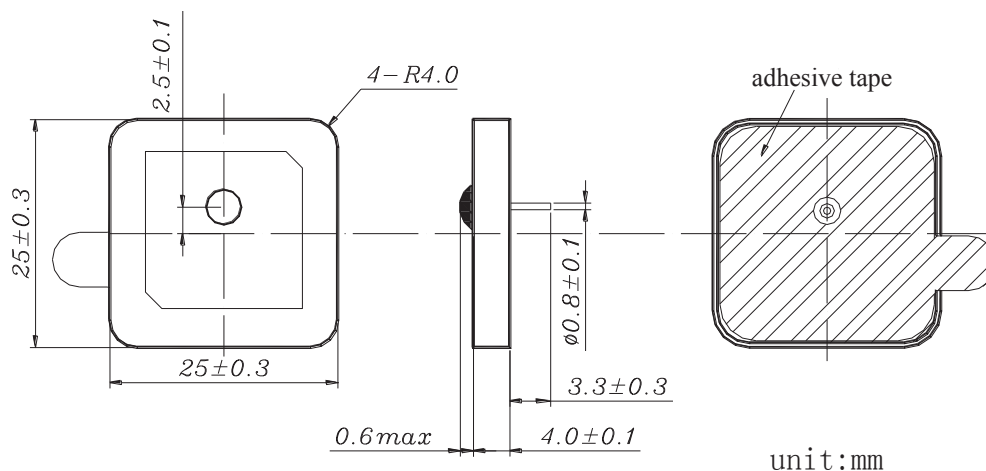


25.0 x 25.0 x 4.0mm

## IMPEDANCE CHARACTERISTICS



## OUTLINE DRAWING:



Dimension: mm

# 868MHz; 25 x 25 x 4mm RFID(EU) Patch Antenna

**APAE868R2540JBDB2-T**

RoHS/ RoHS II compliant



25.0 x 25.0 x 4.0mm

## PACKAGING:

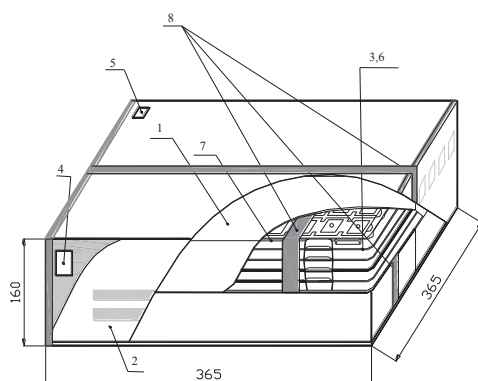
“T” is for a vacuum sealed tray containing 50 units.

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

NOTE: Recommend vacuum storage under normal temperature and dry conditions, valid for 12 months after production is completed.

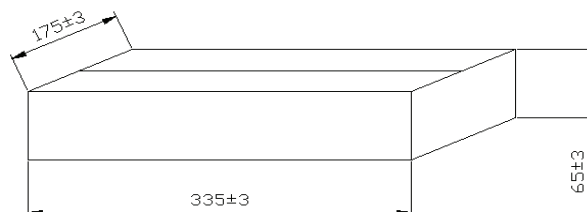
- Normal temperature: 25°C
- Humidity: 40%

If the package is taken apart, the patch surface is exposed to moisture and gets oxidized. The rate of oxidation is dependent on the environmental conditions.



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



# 868MHz; 25 x 25 x 4mm RFID(EU) Patch Antenna

**APAE868R2540JBDB2-T**

RoHS/ RoHS II compliant



25.0 x 25.0 x 4.0mm

## 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.

**ATTENTION:** Abracon LLC'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-dependent 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 LLC is required. Please contact Abracon LLC for more information.



5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
For terms and conditions of sales, please visit:  
[www.abracon.com](http://www.abracon.com)

REVISED: 12-3-19

ABRACON IS  
ISO9001-2015  
CERTIFIED

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[ABRACON:](#)

[APAE868R2540JBDB2-T](#)