

# Evaluation Board - 915/868/433 MHz: LPWA/ISM Multiband Chip Antenna

ACR1504I3-EVB

Request Samples



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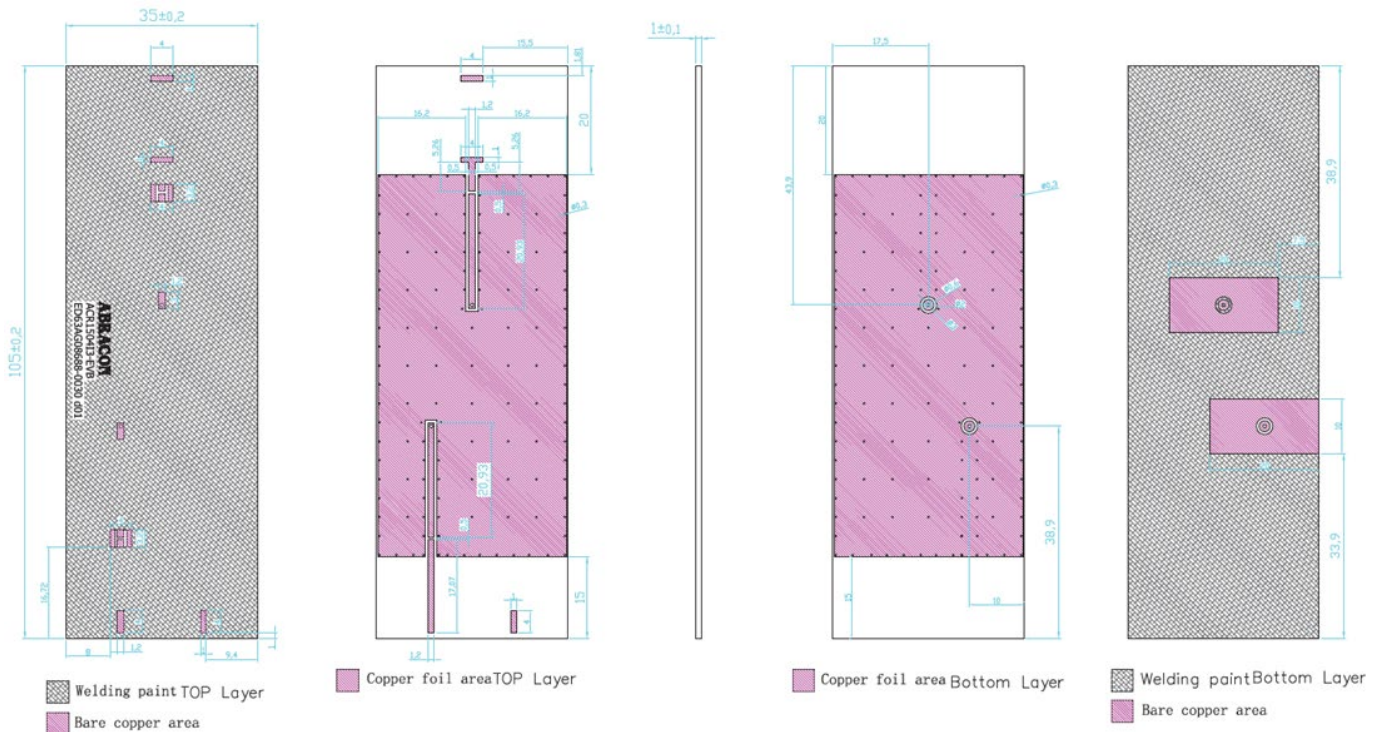
105 x 35 x 1 mm  
RoHS/RoHS II Compliant  
MSL Level = N/A

## Description

ACR1504I3-EVB Evaluation boards are designed to provide a means to facilitate engineering evaluation of the chip antenna: ACR1504I3. With a typical operating frequencies of 915/868/433 MHz, the chip can be used for 915/868/433 MHz LPWA/ISM applications.

To evaluate the performance of antenna, calibrate the Vector Network analyzer (VNA) for the testing frequency band and connect the evaluation board to the calibrated port using the given SMA connector on the board.

## Evaluation Board and Dimensions & Marking



Note: Evaluation Board dimension: 105 x 35 x 1 mm

Unit: mm

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Part Number Builder

ACR1504I3 - EVB - □



Code	Operating Frequency
S (Standard)	915 MHz
A	868 MHz
B	433 MHz

## Example Configurations :

Part Number	Operating Frequency	Configuration
ACR1504I3-EVB-S	915 MHz	EVB tuned to operate at 915 MHz as center frequency (Standard)
ACR1504I3-EVB-A	868 MHz	EVB tuned to operate at 868 MHz as center frequency

## Note :

- For the standard part number (ACR1504I3-EVB-S), please refer to the packaging at the end of the document.
- For custom configurations (ACR1504I3-EVB-□), MOQs, pricing and packaging changes may be applicable.

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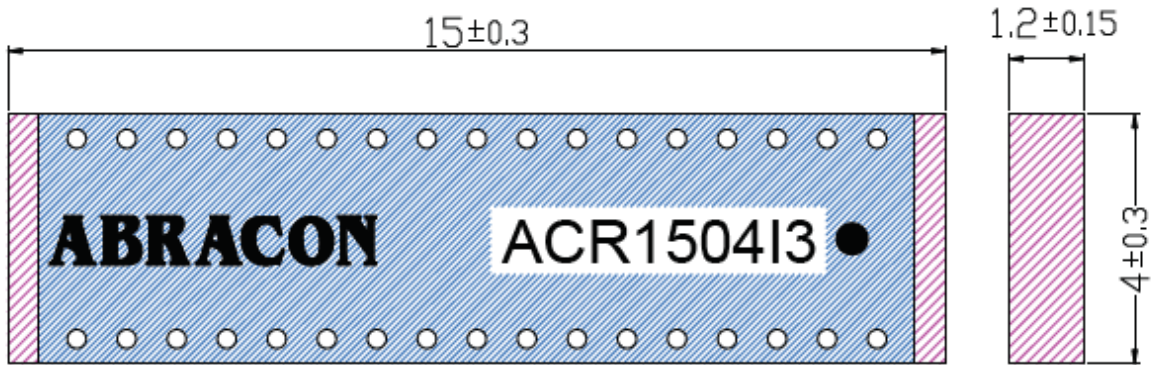


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## Chip Antenna Dimension



Unit: mm

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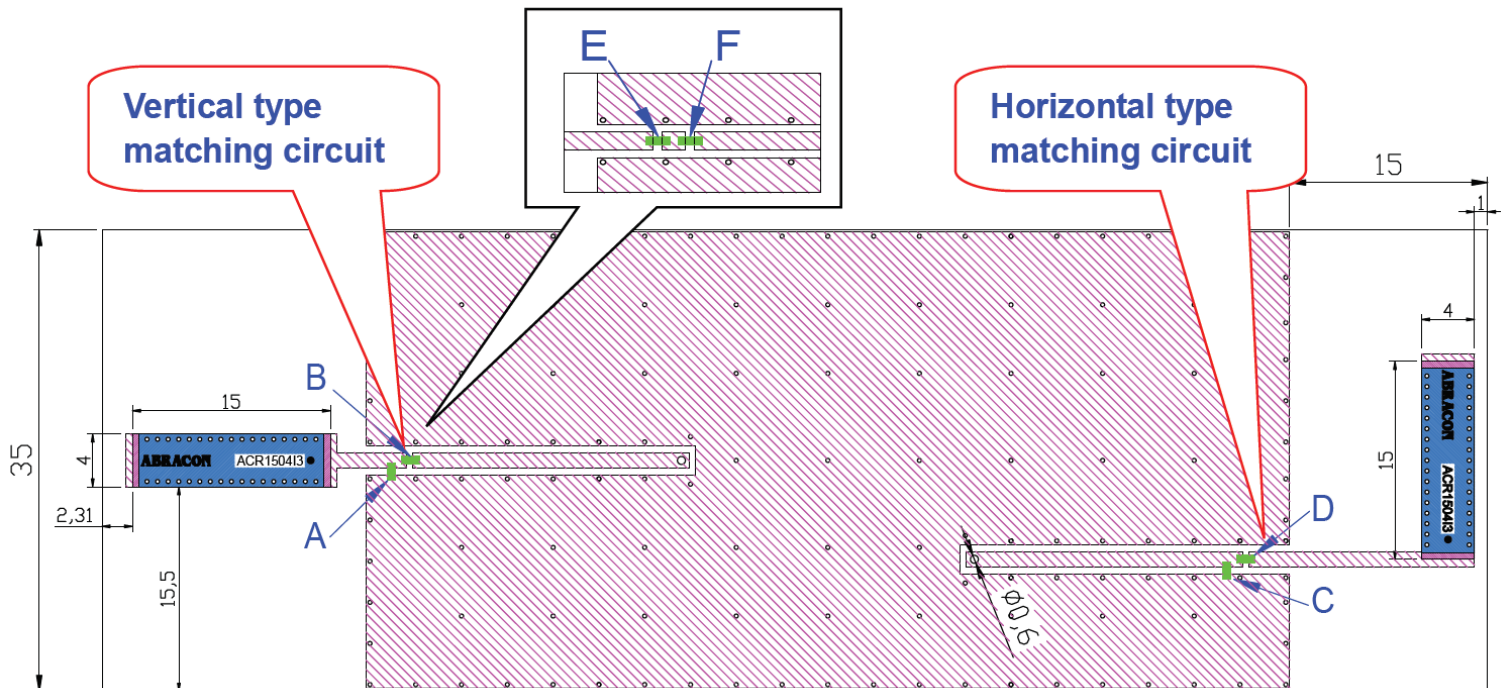


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## Matching Network on EVB



Frequency	915 MHz		868 MHz		433 MHz	
Vertical Type (Ant 1)	A = 12 nH	B = 33 nH	A = 0.5 pF	B = 5.6 pF	E = 82 nH	F = 15 nH
Horizontal Type (Ant 2)	C = 6.8 nH	D = 4.7 nH	D = 1.5 pF		D = 91 nH	

### Note:

1. Desired metal/ground clearance area: 35 x 15 mm for antenna 1 & 35 x 20 mm for antenna 2.
2. Width of the 50  $\Omega$  line is designed in accordance with the PCB thickness and material considered
3. Matching network provided is in accordance with the EVB layout and matching will differ in the actual customer PCB depending on the layout

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5101 Hidden Creek Ln Spicewood TX 78669  
Phone: 512-371-6159 | Fax: 512-351-8858  
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