5.5 GHz Ceramic Chip Evalution Board

ACAG0301-5500-EVB

90.0 x 50.0 mm

Description

ACAG0301-5500-EVB Evaluation boards are designed to provide a means to facilitate engineering evaluation of the chip antenna : ACAG0301-5500-T working at 5500 MHz. With a typical bandwidth of 800 MHz, the chip can be used for Wi-Fi and 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.
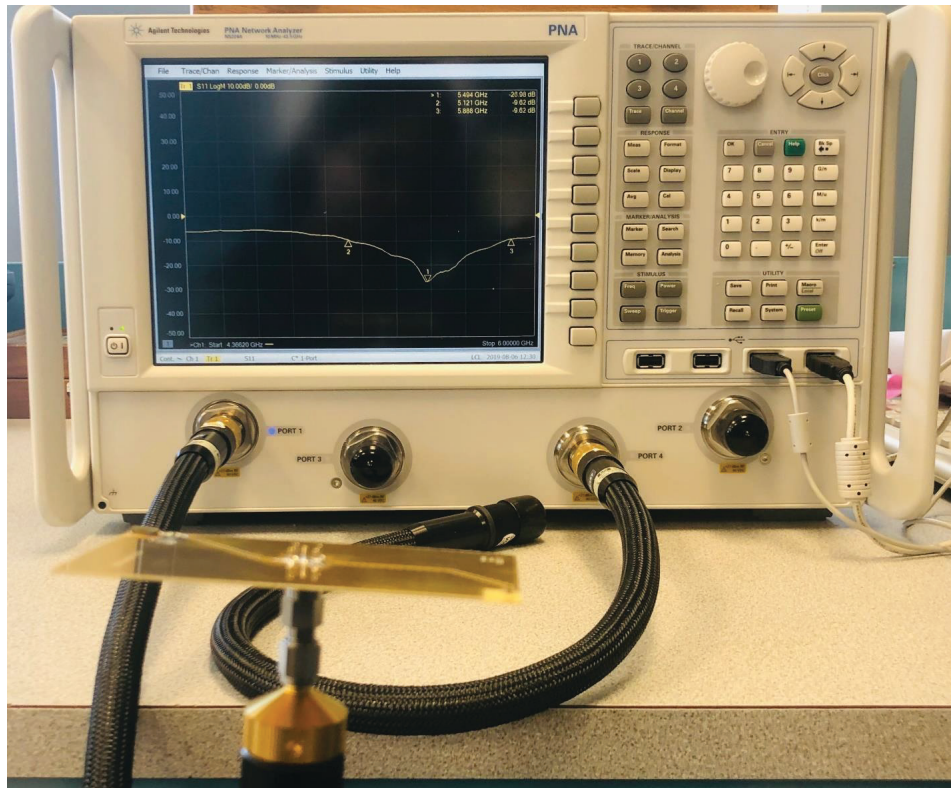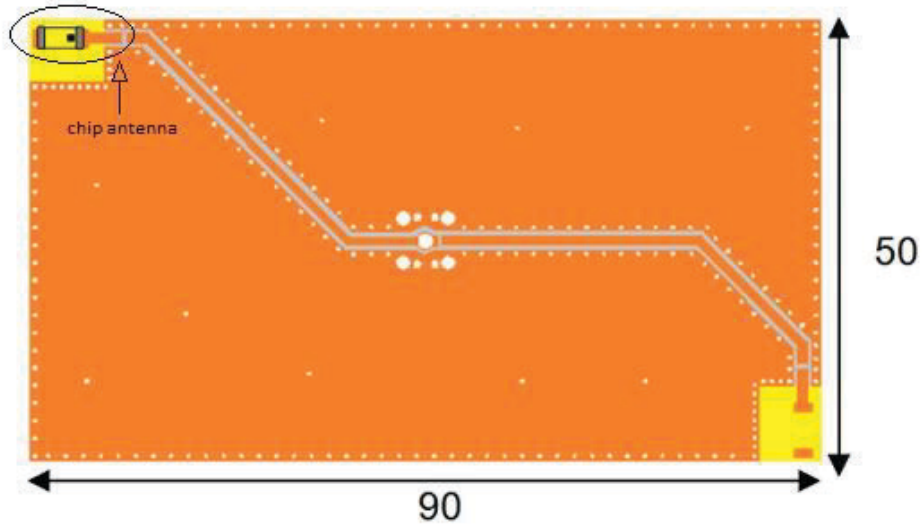
5.5 GHz Ceramic Chip Antenna Evalution Board

Evaluation Board with Chip Antenna Layout

chip antenna

50

90

Evaluation Board dimension : 90 x 50 mm
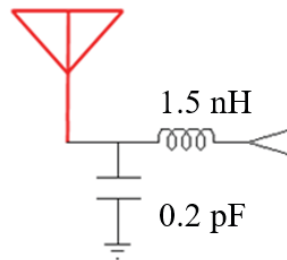
Unit: mm

Chip Antenna Layout

Unit: mm

Matching Network on EVB:

Antenna matching network is designed using a combination of capacitor (0.2 pF) and inductor (1.5 nH) near the input terminal as shown in the above figure.
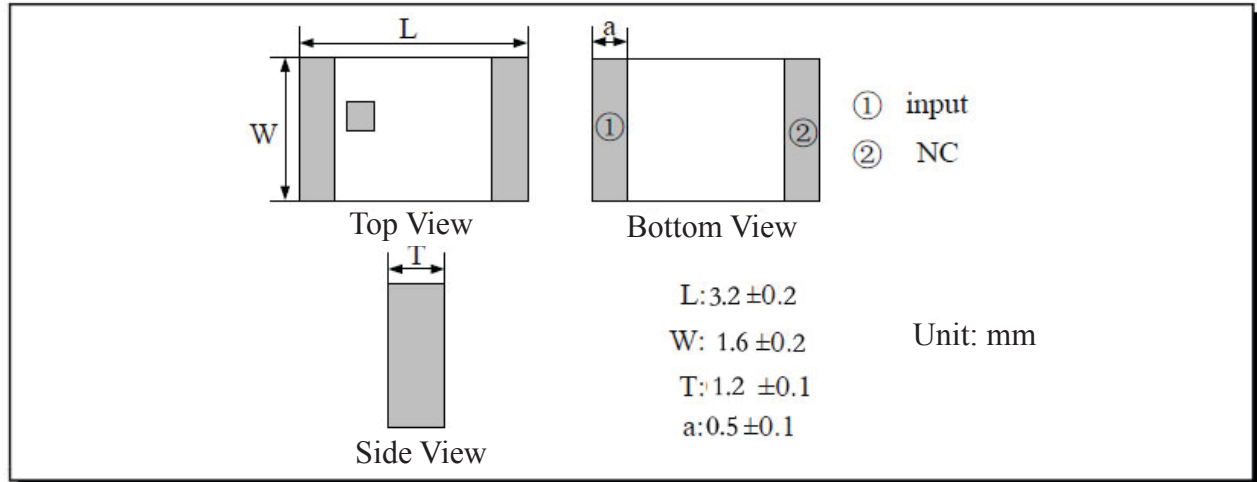

Note :

1. Yellow highlighted space represents the ground clearance area around the chip antenna.
2. Desired clearance area : 7.4 x 7.0 mm
3. Width of the 50 Ω line is designed in accordance with the PCB thickness and material considered.
4. Matching network (Pi - network) provided is in accordance with the EVB layout and matching will differ in the actual customer PCB depending on the layout.

Chip Antenna

Top View

Bottom View

① input
② NC

Side View

L: 3.2 ±0.2
W: 1.6 ±0.2
T: 1.2 ±0.1
a: 0.5 ±0.1

Unit: mm

Unit: mm