

# GNSS/GPS/GLONASS/BEIDOU SMD Chip Antenna Evaluation Board

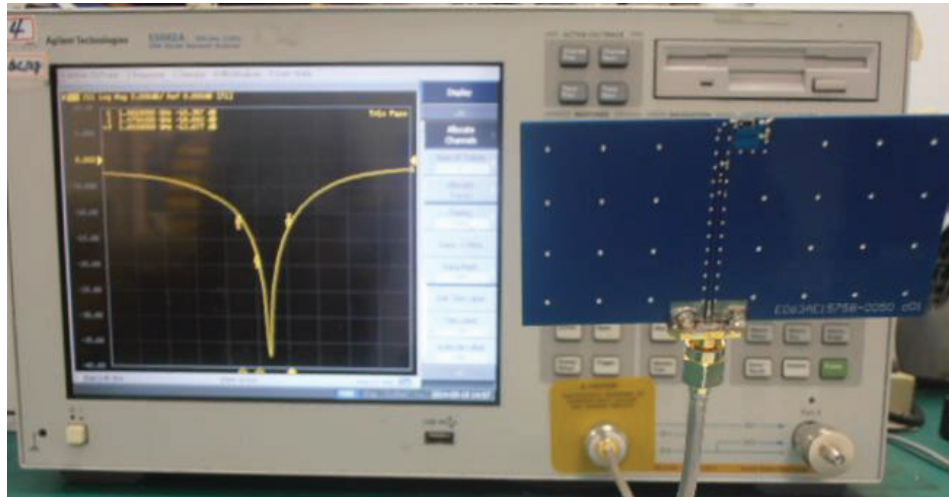
ACAR0301-SG3-EVB

80.0 x 40.0 mm

## Description

ACAR0301-SG3-EVB Evaluation boards are designed to provide a means to facilitate engineering evaluation of the chip antenna : ACAR0301-SG3-T working between 1561~1610 MHz. With a typical bandwidth of 49 MHz, the chip can be used for GNSS 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.

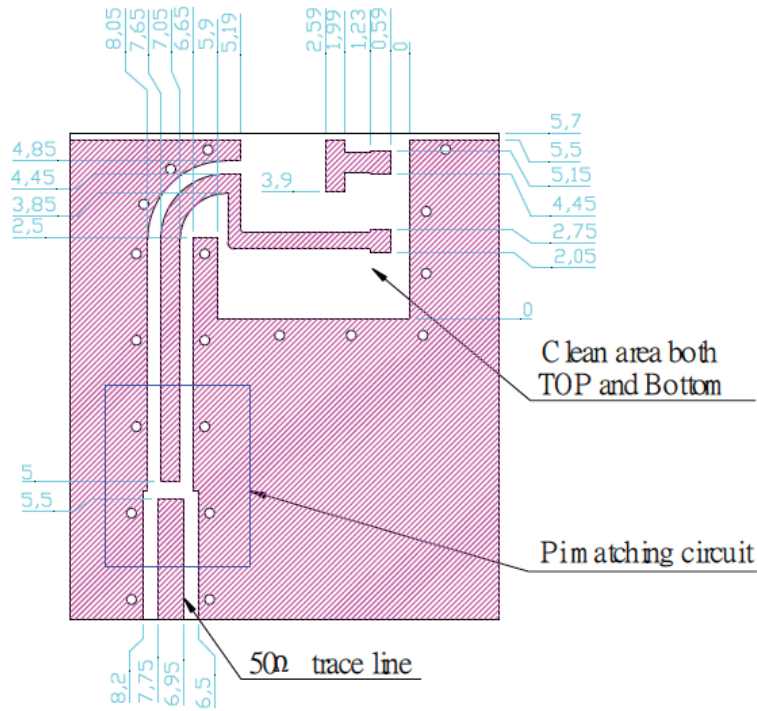




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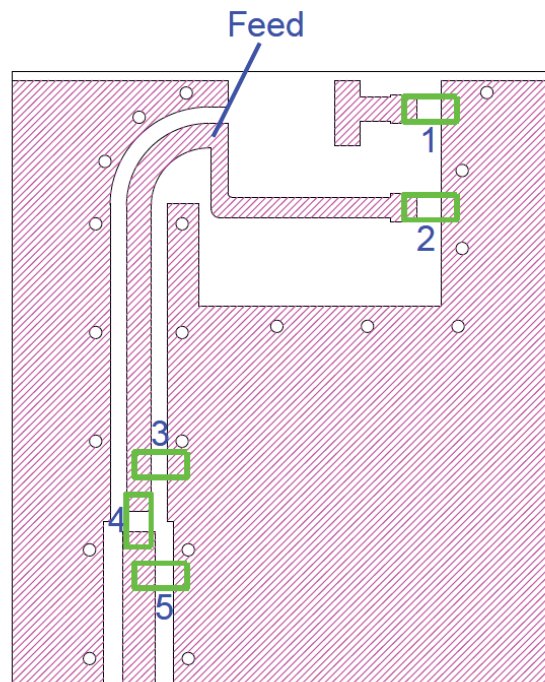
## Chip Antenna Layout



Unit: mm

## Matching Network on EVB

Antenna matching network is designed using a combination of capacitors near the input terminal.



Matching Circuit Component					
No.	1	2	3	4	5
Description	2 pF	1 pF	3.3 pF	0 $\Omega$	NA

### Note :

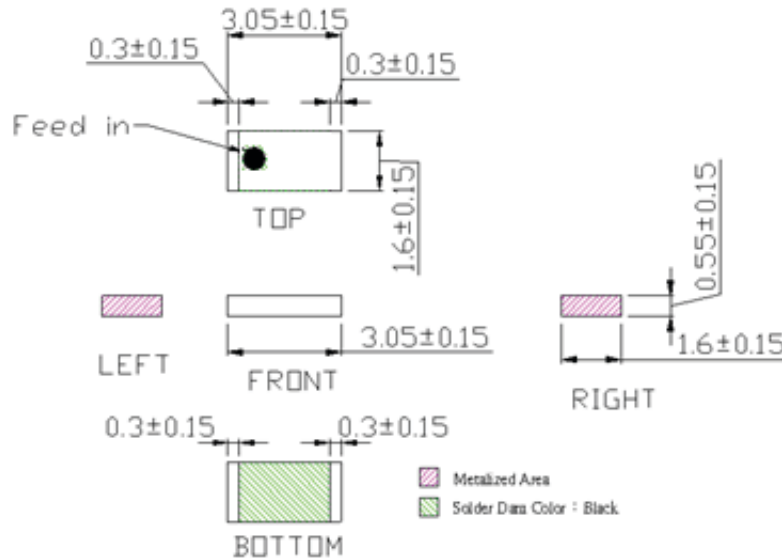
1. White space around the chip antenna in “Chip Antenna Layout” represents the ground clearance area.
2. Desired clearance area : 5.9 x 5.7 mm
3. Width of the 50  $\Omega$  line is designed in accordance with the PCB thickness and material considered.
4. Matching network (Pi - network) provided is in accordance with the EVB layout and matching will differ in the actual customer PCB depending on the layout.

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## Chip Antenna Dimension



Unit: mm

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