

4G/LTE Ceramic Chip Antenna Evaluation Board

ACAR4008-S698-EVB

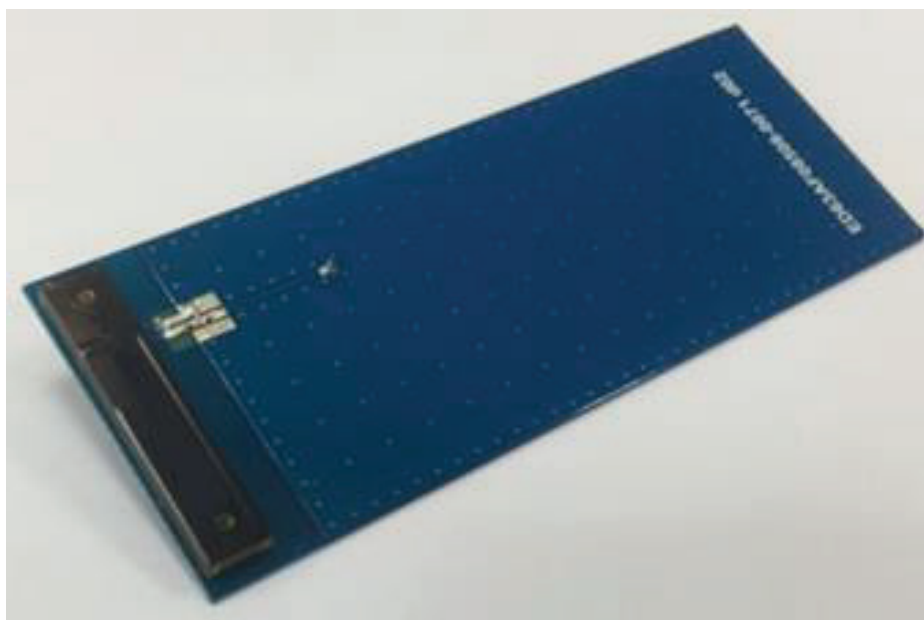
120.0 x 45.0 mm

Description

ACAR4008-S698-EVB Evaluation boards are designed to provide a means to facilitate engineering evaluation of the chip antenna : ACAR4008-S698-T. With a typical operating frequency between 700 and 2700 MHz, the chip can be used for 2G/3G/GSM/4G/LTE 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 with Matching Circuits



Evaluation Board dimension : 120 x 45 mm

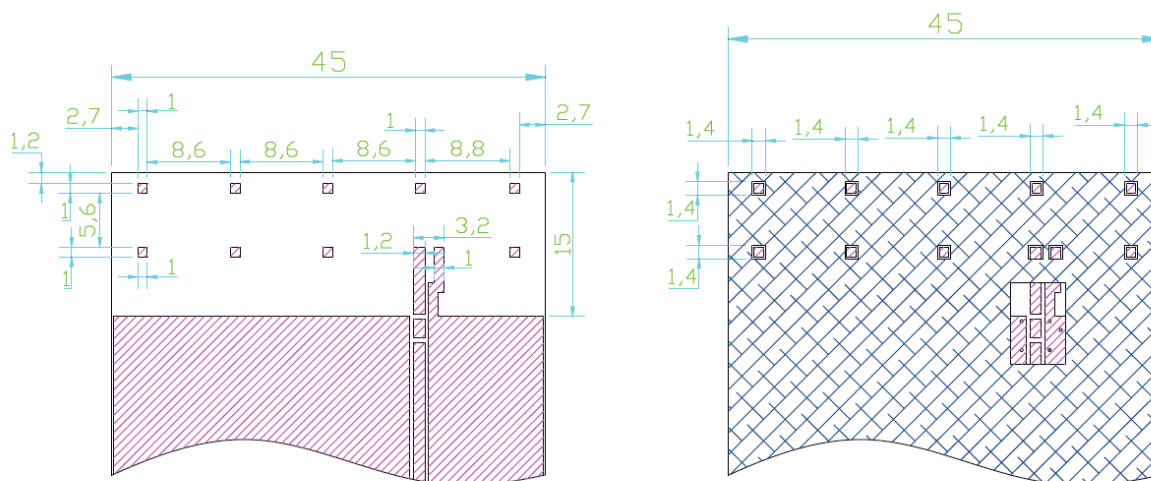
Unit: mm

4G/LTE Ceramic Chip Antenna Evaluation Board

ACAR4008-S698-EVB

120.0 x 45.0 mm

Chip Antenna Layout



 Copper layer

Top layer

 Solder area

 Solder mask

Top layer

Tolerance : ± 0.1 mm, unless otherwise specified.
t, w : Unique dimensioning according to your PCB

Unit: mm

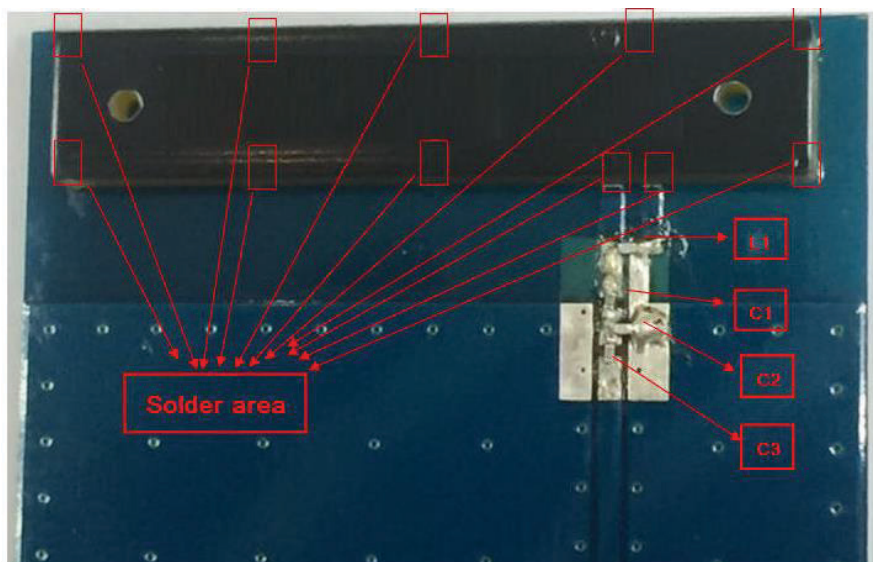
4G/LTE Ceramic Chip Antenna Evaluation Board

ACAR4008-S698-EVB

120.0 x 45.0 mm

Matching Network on EVB

Antenna matching network is designed using a combination of inductor and resistor near the input terminal.



Circuit Symbol	Size	Description
L1	0402	6.8 nH
C1	0402	6.8 pF
C2	0402	1.2 pF
C3	0402	6.8 pF

Note :

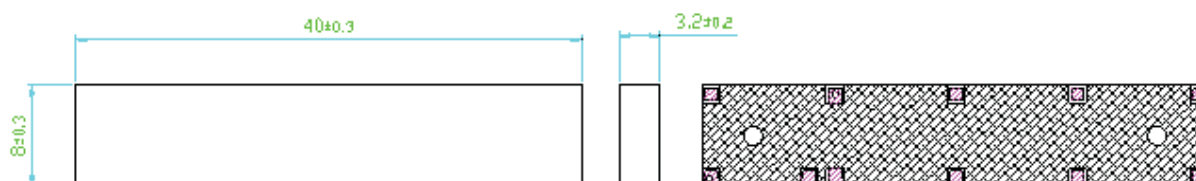
1. White space around the chip antenna in “Chip Antenna Layout” represents the ground clearance area.
2. Desired clearance area : 45 x 15 mm
3. Width of the 50 Ω line is designed in accordance with the PCB thickness and material considered.
4. Matching network (Pi - network) provided is in accordance with the EVB layout and matching will differ in the actual customer PCB depending on the layout.

4G/LTE Ceramic Chip Antenna Evaluation Board

ACAR4008-S698-EVB

120.0 x 45.0 mm

Chip Antenna Dimension



Unit: mm

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

REVISED: 09-3-19

ABRACON IS
ISO9001-2015
CERTIFIED