

CA3509M4-EV23

Evaluation Board

- Circuit description
- Typical performance data
- Gain and return loss plots
- Circuit schematic and assembly drawing

Circuit Description

The CA3509M4-EV23 evaluation circuit board provides a quick and convenient means of evaluating the performance of CEL's low noise amplifier IC CA3509M4 at frequency of 2.33GHz.

The PCB is FR4 four layer board. The top dielectric layer is 8mil thick and $Dk=4.3$. All signal traces are on the top metal layer and the second metal layer is ground. The rest is for mechanical support. The total board thickness is 62mil.

The board also includes two connectors for the measurement of through loss.

Typical Performance Specifications

Test Conditions:

$f=2.33$ GHz; $V_d=3V$, $I_d=15mA$

Noise Figure: 0.85dB (direct measurement on board). The total board loss is about 0.3dB

Gain: 16.5dB

Input return loss: 12dB

Output return loss: 10dB

IP1dB: -2dBm



