

Low Noise Amplifier Chip

AAS2211

Product Specification

V1.0

1. Product Features

Frequency Range: 7~13GHz

Small Signal Gain: 28dB

Noise Figure: 0.7 dB

Output 1dB Compression Point: 4 dBm

Bias Conditions: $V_D = 3.3V$, $I_{DQ} = 12mA$

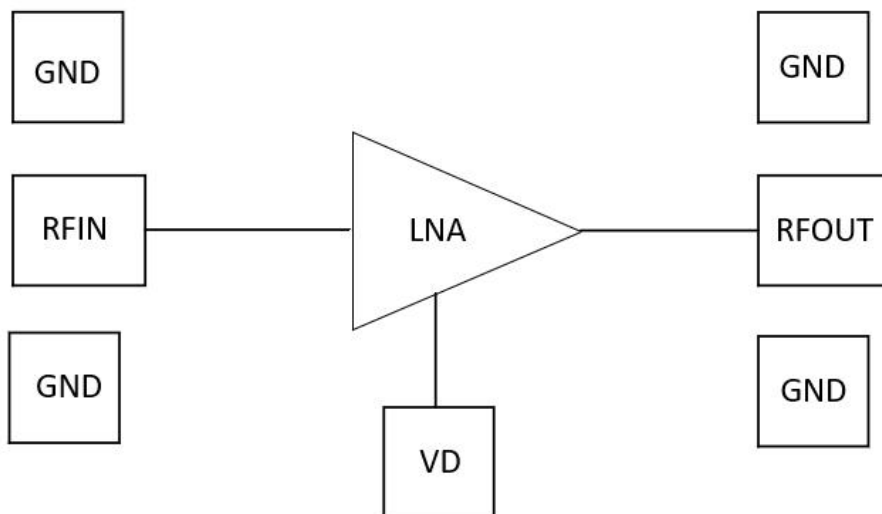
Chip Dimensions: 1.2mm×0.85mm×0.1mm

2. Functional Overview

The AAS2211 is a low noise amplifier (LNA) chip operating in the 7~13GHz frequency band. It adopts a single 3.3V power supply. At an operating current of 12mA, it provides a small signal gain of 28dB, an output 1dB compression point of 4 dBm, and a typical noise figure of 0.7dB.

DC blocking capacitors are integrated at all RF ports of the chip, with a port impedance of 50Ω . The chip achieves grounding through backside metalization.

3. Block Diagram



4. Typical Applications

Suitable for communication, radar and other application fields.

5. Electrical Performance Parameters

5.1 RF Characteristics

Unless otherwise specified, all electrical characteristics are measured under the following conditions: $V_D = 3.3V$, $I_{DQ} = 12mA$, small signal input power $P_{in} = -35dBm$, ambient temperature $T_A = +25^\circ C$, in a 50Ω system.