# Low Noise Amplifier Chip

# AAS2201

# 产品规格书

# V1.0

## 1. Product Features

**Frequency Range:** 2~20GHz

**Small Signal Gain:** 17dB

**Noise Figure:** 1.5dB

**Output 1dB Compression Point:** 14.5dBm

**Output Third-Order Intercept Point:** 26dBm

**Bias Condition:** VD = 5V, IDQ = 68mA

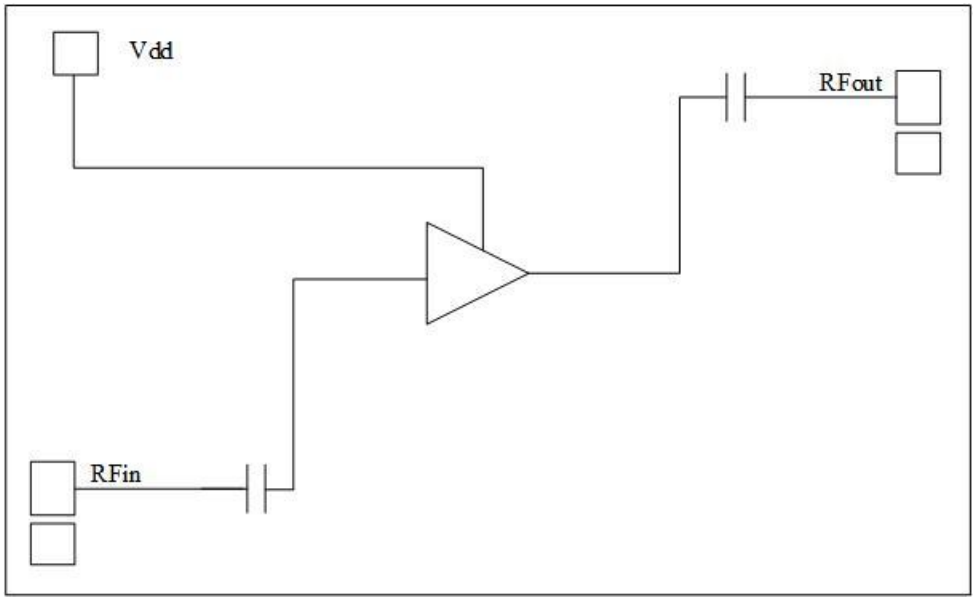
**Chip Dimensions:** 3.1mm×1.3mm×0.07mm

## 2. Functional Overview

The AAS2201 is a low noise amplifier (LNA) chip operating in the frequency range of 2 to 20GHz. It adopts a single +5V power supply. At an operating current of 68mA, it provides a small signal gain of 17dB, with an output 1dB compression point of 14.5dBm and a typical noise figure of 1.5dB.

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. Functional Block Diagram




## 4. Typical Applications

Applicable to communication, radar and other related fields.

## 5. Electrical Performance Parameters

### 5.1 RF Characteristics

Unless otherwise specified, all electrical characteristics are measured under the following conditions: VD = 5V, IDQ = 68mA, Ambient Temperature (TA) = +25° C, in a 50Ω test system.