# Low Noise Amplifier Chip

# AAS2215

# Product Specification

# V1.0

## 1. Product Features

**Frequency Range:** 14~18 GHz

**Small Signal Gain:** 31 dB

**Noise Figure:** 0.9 dB

**Output P1dB (OP1dB):** 5 dBm

**Input P1dB (IP1dB):** -25 dBm

**Bias Conditions:** VC = 5V, IDQ = 13mA

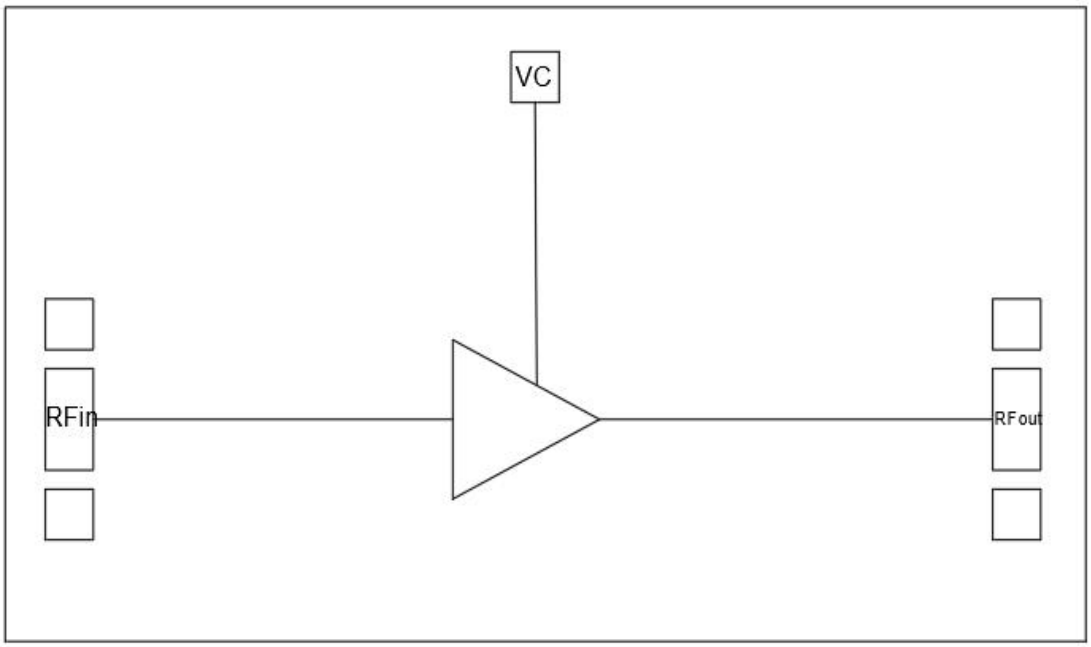
**Chip Dimensions:** 2mm×0.7mm×0.1mm

## 2. Functional Overview

This chip is a low noise amplifier operating in the 14~18 GHz frequency band, powered by a +5V supply. At an operating current of 13mA, it provides a small signal gain of 31 dB with an output P1dB of 5 dBm and a typical noise figure of 0.9 dB.

DC blocking capacitors are integrated at all RF ports of the chip, with a port impedance of 50Ω. The chip adopts backside metal grounding design.

## 3. Block Diagram




## 4. Typical Applications

Applicable to communication, radar and other related fields.

## 5. Electrical Characteristics

### 5.1 RF Characteristics

Unless otherwise specified, all electrical parameters are measured under the following conditions: VC = 5.0V, IDQ = 13mA, small signal input power Pin = -25dBm, ambient temperature TA = +25° C, 50Ω system, continuous wave signal.