

Low Noise Amplifier Chip

**AAS2200**

Product Specification

**V1.1**

## 1. Product Features

**Frequency Range:** 12~18GHz

**Small Signal Gain:** 27.5dB

**Noise Figure:** 0.7dB (Typical)

**Output 1dB Compression Point:** 2dBm

**Bias Conditions:**  $V_D = 3.3V$ ,  $I_{DQ} = 11mA$

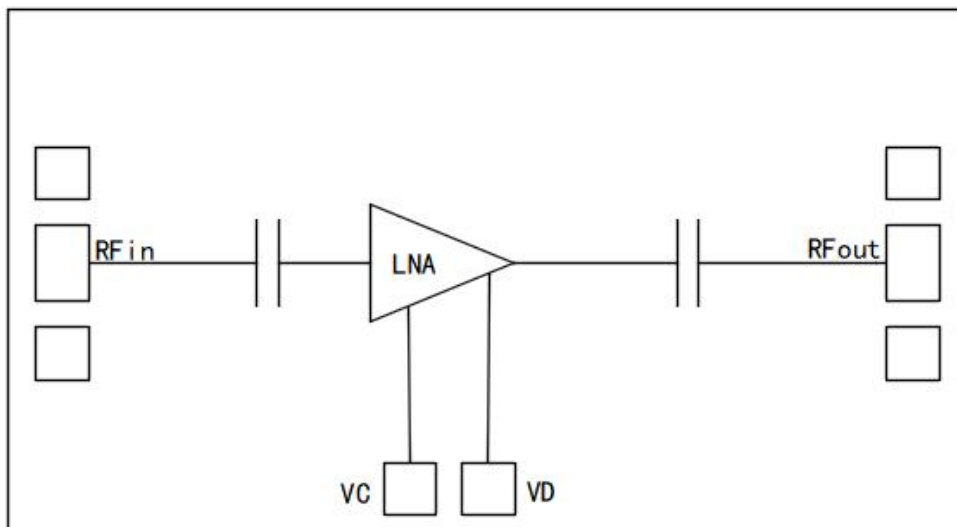
**Chip Dimensions:** 0.75mm×0.65mm×0.1mm

## 2. Functional Overview

The AAS2200 is a low noise amplifier chip operating in the 12~18GHz frequency band. Under the operating conditions of +3.3V and 11mA, it provides a gain of 27.5dB, an output 1dB compression point of 2dBm, and a typical noise figure of 0.7dB.

The port impedance of the chip is  $50\Omega$ , and the chip adopts backside metal grounding.

## 3. Functional 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:  $V_D = 3.3V$ ,  $I_{DQ} = 11mA$ , small signal input power  $P_{in} = -35dBm$ , ambient temperature  $T_A = +25^\circ C$ , in a  $50\Omega$  system.