Low Noise Amplifier Chip

AAS2204-A

Product Specification

V1.0

AAS2204-A

低噪声放大器芯片

1. Product Features

Frequency Range: 17~22 GHzSmall Signal

Gain: 28.5 dBNoise Figure: 0.9 dB

Output 1dB Compression Point (OP1dB): 6.3 dBmInput 1dB Compression Point (IP1dB): -21.5 dBm

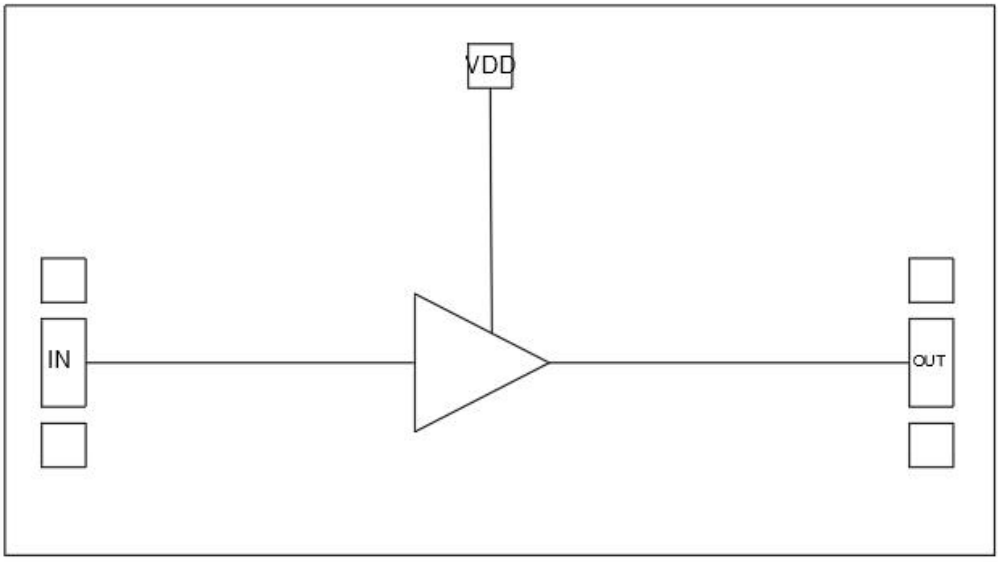
Bias Condition: VDD = 5V, IDQ = 15mA

Chip Dimensions: 1.0mm×0.575mm×0.1mm

2. Functional Description

This is a low noise amplifier chip operating at 17~22 GHz. It operates with a +5V power supply. At an operating current of 15mA, it provides a gain of 28.5 dB, with an OP1dB of 6.3 dBm and a typical noise figure of 0.9 dB. DC blocking capacitors are integrated at all RF ports, with a port impedance of 50Ω. The chip is grounded via backside metal.

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: VDD = 5.0V, IDQ = 15mA, small signal input power Pin = -35dBm, ambient temperature TA = +25° C, 50Ω system and continuous wave mode.