

Low Noise Amplifier Chip

AAS2212

Product Specification

V1.0

1. Product Features

Frequency Range: 32~38GHz

Small Signal Gain: 32dB

Noise Figure: 1.7dB

Output 1dB Compression Point: 2dBm

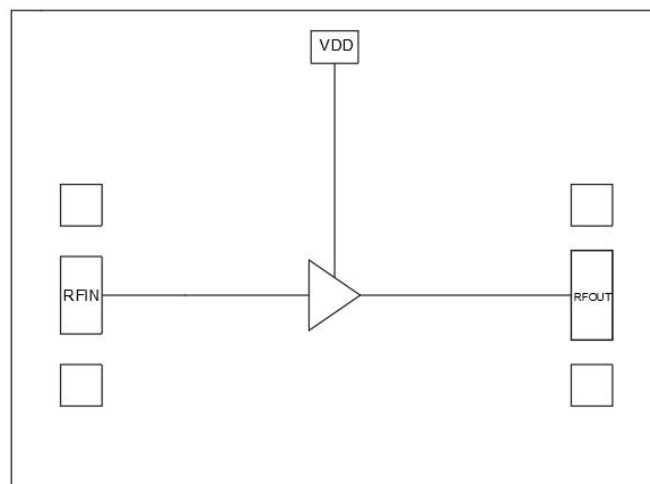
Bias Conditions: $V_D = 3.3V$, $I_{DQ} = 13.5mA$

Chip Dimensions: $1.04mm \times 0.75mm \times 0.10mm$

2. Functional Description

The AAS2212 is a low noise amplifier chip operating from 32GHz to 38GHz. Under the operating conditions of +3.3V and 13.5mA, it provides 32dB gain with an output 1dB compression point of 2dBm and a typical noise figure of 1.7dB. The chip features a 50Ω port impedance and adopts backside metal grounding.

3. Block Diagram



4. Typical Applications

Suitable for applications in communication, radar and other fields.

5. Electrical Characteristics

5.1 RF Characteristics

Unless otherwise specified, all electrical parameters are measured under the following conditions: $V_D = 3.3V$, $I_{DQ} = 13.5mA$, small signal input power $P_{in} = -40dBm$, ambient temperature $T_A = +25^\circ C$, 50Ω system, continuous wave (CW).