Driver Amplifier Chip

AAS3104

Product Datasheet

V1.0

1. Product Features

- Frequency Range: 300~900 MHz
- Small-signal Gain: 29 dB
- Output P1dB: 20 dBm
- Bias Condition: VDD = 5 V, IDQ = 85 mA, Zin/Zout = 50 Ω
- Chip Dimensions: 1850 μm × 1600 μm × 100 μm

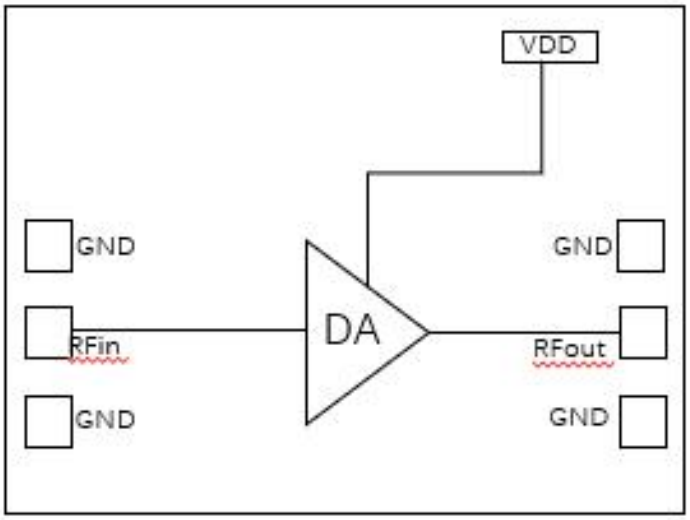
2. Functional Description

This chip is a driver amplifier operating in the 300~900 MHz frequency band. It uses a single +5 V power supply and delivers a gain of 29 dB with an output P1dB of 20 dBm at a quiescent current of 85 mA.

DC-blocking capacitors are integrated at the RF ports, and the port impedance is 50 Ω, eliminating the need for external matching circuits.

This chip is suitable for applications such as communications and radar systems.

3. Block Diagram



4. Typical Applications

- TDD or FDD systems
- General-purpose wireless systems

5. Electrical Parameters

5.1 RF Characteristics

Test Conditions: 50 Ω system, VDD = 5 V, IDQ = 85 mA, Temp = +25 ℃ (de-embedded data)