Switched Low Noise Amplifier Packaged Chip

AASL105AL

Product Specification

V1.0

1. Product Features

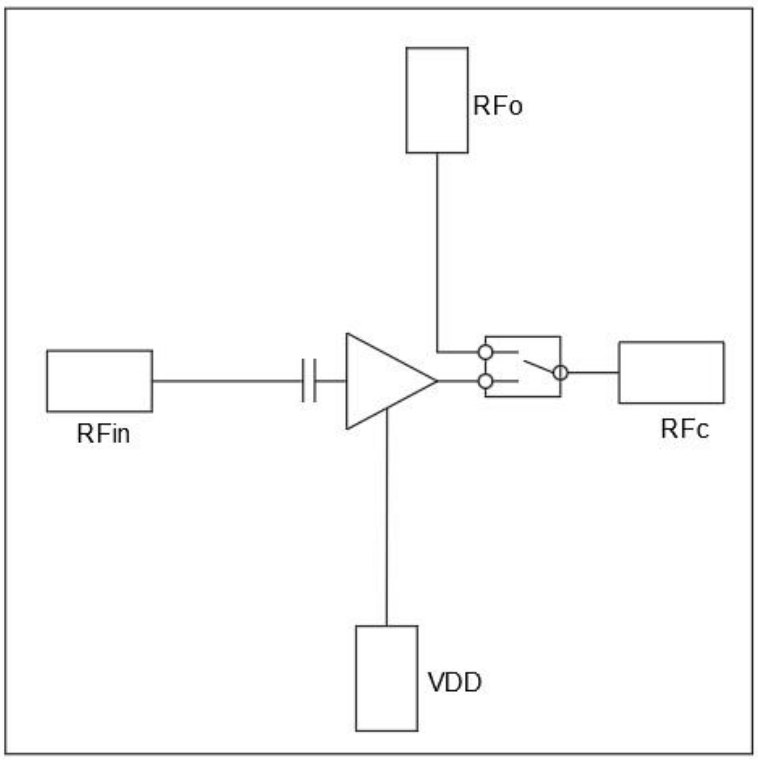
Frequency Range: 450~650MHz
Small Signal Gain: 24.5dB
Output P1dB: 22 dBm
Noise Figure: 0.58dB
Output Third-order Intercept Point (OIP3): 35 dBm
Insertion Loss: 0.9dB
Bias Conditions: VDD = 5V, IDD = 85mA, Zin/Zout=50Ω
Chip Dimensions: 4mm×4mm×1.15mm

2. Functional Overview

This chip is a packaged switched low noise amplifier operating in the frequency range of 450~650MHz. It adopts a single 5V power supply. At an operating current of 85mA, it provides a gain of 24.5dB, with an output P1dB power of 22 dBm, an output third-order intercept power of 35 dBm, a noise figure of 0.58dB, and an insertion loss of 0.9dB.

The chip is applicable to communication, radar and other application fields.

3. Block Diagram



4. Typical Applications

- Point-to-point radio for cellular backhaul applications
- Repeaters / Distributed Antenna System (DAS)
- TDD or FDD systems
- Wireless communication

5. Electrical Performance Parameters

5.1 RF Characteristics

Unless otherwise specified, all electrical characteristics are measured under small signal conditions at TA = +25℃ in a continuous-wave 50Ω system.