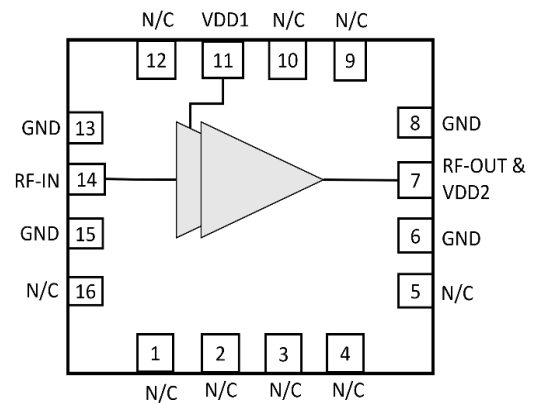


The RFLN07S is an unmatched low-noise amplifier (LNA) designed for RF receiver front-end applications. The amplifier employs a self-bias topology, which simplifies biasing and reduces the need for external bias control circuitry.

The unmatched design allows the use of external (off-chip) matching networks to adjust input and output impedance based on system requirements. With appropriate matching, the RFLN07S provides useful gain with controlled noise performance, making it suitable for general RF receiver stages where flexibility in matching and ease of integration are required. The block supports external matching to standard 50 Ω systems.

Functional Block Diagram



Features:

- RF Frequency: 2 - 7 GHz
- Small signal gain: 27 dB
- Noise Figure : 0.7-0.9 dB
- Output P1dB: 10.6 dBm
- Saturated Output Power: 17.7 dBm
- DC drain bias voltage: 4 V
- Dc supply current: 47.8 mA
- 0.1um GaAs pHEMT Technology
- Die Size: 1.15 mm *1.02 mm

Applications:

- Microwave devices
- Communications

Pin Configuration

Pin No.	Pin Name	Description
11	VDD1	Drain Bias Voltage 1
7	VDD2	Drain Bias Voltage 2
14	RF_IN	RF Input
7	RFOUT	RF Output
6,8,13,15	GND	Ground
1,2,3,4,5,9,10,12,16	N/C	Not Connected

Tech Specs:

- Part Number: RFLN07S
- Provider: Millimeterchips Pvt. Ltd.
- Foundry node: 0.1um GaAs pHEMT Win Semiconductors

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