

RF Amp Single Linear Amp 1GHz 5.5V 4-Pin(3+Tab) SOT-89 T/R

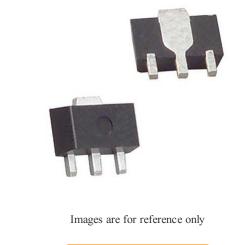
Manufacturer: Analog Devices, Inc

Package/Case: SOT89

Product Type: Amplifier ICs

RoHS Compliant/Lead free RoHS:

Lifecycle: Active



General Description

The ADL5536 is a 20 dB linear amplifier that operates atfrequencies up to 1 GHz. The device can be used in a widevariety of cellular, CATV, military, and instrumentationequipment.

The ADL5536 provides the highest dynamic range available from an internally matched IF gain block. This is accomplished by providing extremely low noise figures and very high OIP3specifications simultaneously across the entire 1 GHz frequencyrange. The ADL5536 also provides extremely flat gain and P1dBover frequency, which are stable over temperature, power supply, and from device to device.

The device is internally matched to 50Ω at the input and output, making the ADL5536 very easy to implement in a wide variety of applications. Only input/output ac coupling capacitors, powersupply decoupling capacitors, and an external inductor are required for operation.

The ADL5536 is fabricated on a GaAs HBT process and has an ESD rating of ±2 kV (Class 2). The device is assembled in an MSL-1 rated SOT-89 package that uses an exposed paddle forexcellent thermal impedance.

The ADL5536 consumes only 105 mA on a single 5 V supplyand is fully specified for operation from -40°C to +85°C. The ADL5536 is also pin-compatible with the 16 dB gainADL5535. Fully populated evaluation boards are available for each amplifier.

Key Features

Fixed gain of 20 dB

Operation from 20 MHz to 1.0 GHz

Input and output internally matched to 50 $\boldsymbol{\Omega}$

Integrated bias control circuit

OIP3

45.0 dBm at 190 MHz

49.0 dBm at 380 MHz

Noise figure

2.6 dB at 190 MHz

2.7 dB at 380 MHz

P1dB of 19.6 dBm at 190 MHz

Single 5 V power supply

Low quiescent current of 105 mA

MSL-1 rated SOT-89 package

ESD rating of ± 2 kV (Class 2)

Pin-compatible with the 16 dB gain ADL5535

Recommended For You

ADF4153BCPZ ADF5355BCPZ AD8318ACPZ

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

QFN LFCSP32 LFCSP

AD6620ASZ ADF4107BCPZ ADL5513ACPZ-R7

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

QFP QFN LFCSP-16

AD8319ACPZ ADRF6755ACPZ ADL5535ARKZ-R7

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

LFCSP QFN SOT89

AD608AR ADF4107BRUZ-REFL7 ADRF6780ACPZN

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

SOP16 TSSOP16 QFN

AD8317ACPZ AD608ARZ AD8318ACPZ-REEL7

Analog Devices, Inc Analog Devices, Inc Analog Devices, Inc

LFCSP SOP16 LFCSP