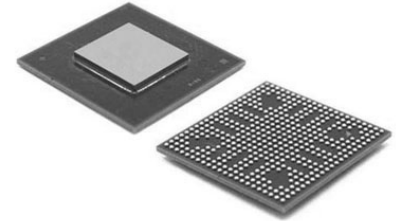


RF Amp Single Gain Amp 2.7GHz 5.5V 8-Pin LFCSP EP T/R



Images are for reference only

[Inquiry](#)

Manufacturer: [Analog Devices, Inc](#)

Package/Case: LFCSP-8

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The AD8353 is a broadband, fixed-gain, linear amplifier that operates at frequencies from 1 MHz up to 2.7 GHz. It is intended for use in a wide variety of wireless devices, including cellular, broadband, CATV, and LMDS/MMDS applications.

By taking advantage of ADI's high performance, complementary Si bipolar process, these gain blocks provide excellent stability over process, temperature, and power supply. This amplifier is single-ended and internally matched to 50 Ω with a return loss of greater than 10 dB over the full operating frequency range.

The AD8353 provides linear output power of 9 dBm with 20 dB of gain at 900 MHz when biased at 3 V and an external RF choke is connected between the power supply and the output pin. The dc supply current is 42 mA. At 900 MHz, the output third-order intercept (OIP3) is greater than 23 dBm and is 19 dBm at 2.7 GHz.

The noise figure is 5.3 dB at 900 MHz. The reverse isolation (S12) is -36 dB at 900 MHz and -30 dB at 2.7 GHz.

The AD8353 can also operate with a 5 V power supply; in which case, no external inductor is required. Under these conditions, the AD8353 delivers 8 dBm with 20 dB of gain at 900 MHz. The dc supply current is 42 mA. At 900 MHz, the OIP3 is greater than 22 dBm and is 19 dBm at 2.7 GHz. The noise figure is 5.6 dB at 900 MHz. The reverse isolation (S12) is -35 dB.

The AD8353 is fabricated on ADI's proprietary, high performance, 25 GHz, Si complementary, bipolar IC process. The AD8353 is available in a chip scale package that uses an exposed paddle for excellent thermal impedance and low impedance electrical connection to ground. It operates over a -40°C to +85°C temperature range, and an evaluation board is also available.

Key Features

Fixed gain of 20 dB

Operational frequency of 1 MHz to 2.7 GHz

Linear output power up to 9 dBm

Input/output internally matched to 50 Ω

Temperature and power supply stable

Noise figure: 5.3 dB

Power supply: 3 V or 5 V

Application

VCO buffers

General Tx/Rx amplification

Power amplifier predrivers

Low power antenna drivers

Recommended For You

ADF4153BCPZ

Analog Devices, Inc
QFN

ADF5355BCPZ

Analog Devices, Inc
LFCSP32

AD8318ACPZ

Analog Devices, Inc
LFCSP

AD6620ASZ

Analog Devices, Inc
QFP

ADF4107BCPZ

Analog Devices, Inc
QFN

ADL5513ACPZ-R7

Analog Devices, Inc
LFCSP-16

AD8319ACPZ

Analog Devices, Inc
LFCSP

ADRF6755ACPZ

Analog Devices, Inc
QFN

ADL5535ARKZ-R7

Analog Devices, Inc
SOT89

AD608AR

Analog Devices, Inc
SOP16

ADF4107BRUZ-REEL7

Analog Devices, Inc
TSSOP16

ADRF6780ACPZN

Analog Devices, Inc
QFN

AD8317ACPZ

Analog Devices, Inc
LFCSP

AD608ARZ

Analog Devices, Inc
SOP16

AD8318ACPZ-REEL7

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