



Data Sheet

ANALOG DEVICES AD9631ARZ Operational amplifier, single channel, 320 MHz, 1 amplifier, 1.3 kV/ μ s, \pm 3V to \pm 6V, SOIC, 8-pin

Manufacturers <u>Analog Devices, Inc</u>

Package/Case SOIC-8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD9631ARZ or Final to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD9631/AD9632 are very high speed and wide bandwidth amplifiers. The AD9631 is unity gain stable. The AD9632 is stable at gains of 2 or greater. Using a voltage feedback architecture, the exceptional settling time, bandwidth, and low distortion of the AD9631/AD9632 meet the requirements of many applications that previously depended on current feedback amplifiers. Its classical op amp structure works much more predictably in many designs.

A proprietary design architecture has produced an amplifier that combines many of the best characteristics of both current feedback and voltage feedback amplifiers. The AD9631/AD9632 exhibit exceptionally fast and accurate pulse response (16 ns to 0.01%) as well as extremely wide small signal and large signal bandwidth and ultralow distortion. The AD9631 achieves -72 dBc at 20 MHz, 320 MHz small signal bandwidth, and 175 MHz large signal bandwidths.

These characteristics position the AD9631/AD9632 ideally for driving flash as well as high resolution ADCs. Additionally, the balanced high impedance inputs of the voltage feedback architecture allow maximum flexibility when designing active filters.

The AD9631/AD9632 are offered in the industrial (-40°C to +85°C) temperature range. They are available in PDIP and SOIC.

Features

Wide BandwidthAD9631,>

ADC input driver

Application

Tibe input drive.

Ultralow Distortion (SFDR), Low Noise–113 dBc Typ @ 1 MHz–95 dBc Typ @ 5 MHz–72 dBc Typ @ 20 MHz46 dBm Third Order Intercept @ 25 MHz7.0 nV/ $\sqrt{\text{Hz}}$ Spectral Noise Density

Differential amplifiers IF/RF amplifiers

High SpeedSlew Rate 1300 V/ μ sSettling 16 ns to 0.01%, 2 V Step ± 3 V to ± 5 V Supply Operation17 mA Supply Current

Pulse amplifiers

Professional video

DAC current to voltage

Baseband and video communications

Pin diode receivers

Active

filters/integrators/log

amps

Related Products



AD8418BRMZ-RL

Analog Devices, Inc MSOP-8



ADA4084-2ARMZ

Analog Devices, Inc MSOP-8



AD8567ARUZ

Analog Devices, Inc TSSOP-14



AD8022ARMZ

Analog Devices, Inc MSOP-8



ADA4528-2ARMZ-R7

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



AD8628AUJZ

Analog Devices, Inc SOP23



AD8041AR

Analog Devices, Inc SOP-8