



Data Sheet

Quad 150 MHz Rail-to-Rail Amplifier; Package: PDIP; No of Pins: 14; Temperature Range: Industrial

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

Package/Case PDIP-14

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD8044ANZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

# **General Description**

The AD8044 is a quad low power, voltage feedback, high speed amplifier designed to operate on  $\pm 3 \text{ V}$ ,  $\pm 5 \text{ V}$  or  $\pm 5 \text{ V}$  supplies. It has true single-supply capability with an input voltage range extending 200 mV below the negative rail and within 1 V of the positive rail.

The output voltage swing extends to within 25 mV of each rail, providing the maximum output dynamic range. Additionally, it features gain flatness of 0.1 dB to 12 MHz while offering differential gain and phase error of 0.04% and 0.22° on a single +5 V supply. This makes the AD8044 ideal for video electronics such as cameras, video switchers or any high speed portable equipment. The AD8044's low distortion and fast settling make it ideal for active filter applications.

The AD8044 offers low power supply current of 13.1 mA max and can run on a single +3.3 V power supply. These features are ideally suited for portable and battery powered applications where size and power are critical.

The wide bandwidth of 150 MHz along with 170 V/ $\mu$ s of slew rate on a single +5 V supply make the AD8044 useful in many general purpose, high speed applications where dual power supplies of up to  $\pm 6$  V and single supplies from +3 V to +12 V are needed. The AD8044 is available in 14-pin plastic DIP and SOIC.

## **Features**

Fully Specified at +3 V, +5 V and  $\pm 5$  V Supplies

Output Swings to Within 25 mV of Either Rail

Input Voltage Range Extends 200 mV Below Ground

No Phase Reversal with Inputs 1 V Beyond Supplies

Low Power of 2.75 mA/Amplifier

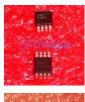
High Speed and Fast Settling on +5 V150 MHz -3 dB Bandwidth>

Good Video Specifications = +2)Gain Flatness of 0.1 dB to 12 MHz0.06% Differential Gain Error0.15° Differential Phase Error

Low Distortion-68 dBc Total Harmonic @ 5 MHz

Outstanding Load Drive CapabilityDrives 30 mA 0.5 V from Supply Rails

### **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