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## AD8001ARZ

Data Sheet

Operational Amplifier, Single, 1 Amplifier, 880 MHz, 1200 V/µs,  $\pm$  3V to  $\pm$  6V, SOIC, 8 Pins

Manufacturers	Analog Devices, Inc	The PART
Package/Case	SOP8	
Product Type	Amplifier ICs	Sec.
RoHS	Rohs	
Lifecycle		Images are for reference only
Please submit RFQ for AD8001ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.		

## **General Description**

The AD8001 is a low power, high speed amplifier designed to operate on  $\pm 5$  V supplies. The AD8001 features unique transimpedance linearization circuitry. This allows it to drive video loads with excellent differential gain and phase performance on only 50 mW of power. The AD8001 is a current feedback amplifier and features gain flatness of 0.1 dB to 100 MHz while offering differential gain and phase error of 0.01% and 0.025°. This makes the AD8001 ideal for professional video electronics such as cameras and video switchers. Additionally, the AD8001's low distortion and fast settling make it ideal for buffer high speed A-to-D converters.

The AD8001 offers low power of 5.5 mA max>

The outstanding bandwidth of 800 MHz along with 1200 V/ $\mu$ s of slew rate make the AD8001 useful in many general purpose high speed applications where dual power supplies of up to  $\pm 6$  V and single supplies from 6 V to 12 V are needed. The AD8001 is available in the industrial temperature range of -40°C to +85°C.

An evaluation board is available for this product and may be ordered using the following product number: AD8001-EB. Schematic and layout for this evaluation board is contained in the product datasheet.

### Features

Excellent Video = +2) Gain Flatness 0.1 dB to 100 MHz0.01% Differential Gain Error0.025° Differential Phase Error

Low Power 5.5 mA Max Power Supply Current (55 mW)

High Speed and Fast Settling 880 MHz, -3 dB Bandwidth = +2)1200 V/µs Slew Rate10 ns Settling Time to 0.1%

Low Distortion 65 dBc THD, = 10 MHz-66 dB SFDR,>

High Output Drive 70 mA Output CurrentDrives Up to 4 Back-Terminated Loads(75Ω Each) While Maintaining Good Differential Gain/Phase Performance(0.05%/0.25°)

#### **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

RMZ ices, Inc