

Operational Amplifier, Single, 1 Amplifier, 1 GHz, 5500 V/ μ s, 5V to \pm 6V, SOIC, 8 Pins

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8009ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD8009 is an ultrahigh speed current feedback amplifier with a phenomenal 5,500 V/ μ s slew rate that results in a rise time of 545 ps, making it ideal as a pulse amplifier.

The high slew rate reduces the effect of slew rate limiting and results in the large signal bandwidth of 440 MHz required for high resolution video graphic systems. Signal quality is maintained over a wide bandwidth with worst case distortion of -40 dBc @ 250 MHz

The AD8009 is capable of delivering over 175 mA of load current and will drive four back terminated video loads while maintaining low differential gain and phase error of 0.02% & 0.04° respectively. The high drive capability is also reflected in the ability to deliver 10 dBm of output power @ 70 MHz with -38 dBc SFDR.

The AD8009 is available in a small SOIC package and will operate over the industrial temperature range -40° C to +85° C. The AD8009 is also available in an SOT-23-5 and will operate over the commercial temperature range of 0° C to 70° C.

An evaluation board is available for this product and may be ordered using the following product number: AD8009-EB.

Features

Ultrahigh Speed 5,500 V/ μ s Slew Rate, 4 V Step, = +2 Large Signal Bandwidth 440 MHz, = +10 Small Signal Bandwidth (-3 dB) 1 GHz, = +2

Settling Time 10 ns to 0.1%, 2 V Step, >

High Output Drive 175 mA Output Load Drive 10 dBm with -38 dBc SFDR @ 70 MHz, >

Low Distortion over Wide Bandwidth SFDR -66 dBc @ 20 MHz, Second Harmonic -75 dBc @ 20 MHz, Third Harmonic Third Order Intercept (3IP) 26 dBm @ 70 MHz, >

Good Video Specifications Gain Flatness 0.1 dB to 75 MHz 0.01% Differential Gain = 150 Ω

Supply Operation +5 V to \pm 5 V Voltage Supply 14 mA (Typ) Supply Current



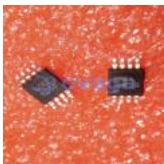


Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8567ARUZ](#)

Analog Devices, Inc
TSSOP-14



[AD8628AUJZ](#)

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SOP23



[AD8022ARMZ](#)

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[AD8041AR](#)

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SOP-8