

Ultralow Distortion, Ultralow Noise Op Amp; Package: SOIC; No of Pins: 8; Temperature Range: Industrial

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 AD797ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD797 is a very low noise, low distortion operational amplifier ideal for use as a preamplifier. The low noise of 0.9 nV(root)Hz and low total harmonic distortion of -120 dB at audio bandwidths give the AD797 the wide dynamic range necessary for preamps in microphones and mixing consoles.

Furthermore, the AD797's excellent slew rate of 20 V/ μ s and 110 MHz gain bandwidth make it highly suitable for low frequency ultrasound applications.

The AD797 is also useful in IR and Sonar Imaging applications where the widest dynamic range is necessary. The low distortion and 16-bit settling time of the AD797 make it ideal for buffering the inputs to Sigma Delta ADCs or the outputs of high resolution DACs especially when they are used in critical applications such as seismic detection and spectrum analyzers. Key features such as a 50 mA output current drive and the specified power supply voltage range of ± 5 to ± 15 volts make the AD797 an excellent general purpose amplifier.

Features

Low Noise: 0.9 nV/√Hz typ (1.2 nV/√Hz max) Input Voltage Noise at 1 kHz 50 nV p-p Input Voltage Noise, 0.1 Hz to 10 Hz

Low Distortion: -120 dB Total Harmonic Distortion at 20 kHz

Excellent DC Precision 80 μV max Input Offset Voltage 1.0 μV/°C VOS Drift

High Output Drive Current of 50 mA

Excellent AC Characteristics 800 ns Settling Time to 16 Bits (10 V Step) 110 MHz Gain Bandwidth = 10) 280 kHz Full Power Bandwidth at 20 V p-p 20 V/μs Slew Rate

Specified for ±5 V and ±15 V Power Supplies

Application

Professional audio preamplifiers

IR, CCD, and sonar imaging systems

Spectrum analyzers

Ultrasound preamplifiers

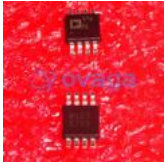
Seismic detectors

Σ-Δ ADC/DAC buffers



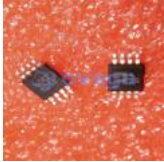


Related Products



[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



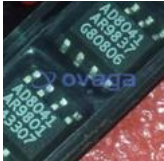
[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8628AUJZ](#)

Analog Devices, Inc
SOP23



[AD8041AR](#)

Analog Devices, Inc
SOP-8