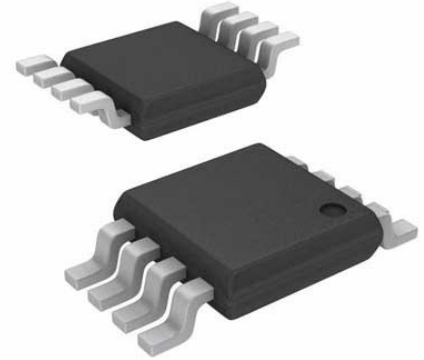


Operational Amplifier, 2 Amplifier, 3.5 MHz, 1.5 V/ μ s, $\pm 5V$ to $\pm 15V$, MSOP, 8 Pins

Manufacturers	Analog Devices, Inc
Package/Case	MSOP8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADA4177-2ARMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADA4177-1 single-channel, ADA4177-2 dual-channel, and ADA4177-4 quad-channel amplifiers feature low offset voltage (2 μ V typical) and drift (1 μ V/ $^{\circ}$ C maximum), low input bias current, low noise, and low current consumption (500 μ A typical). Outputs are stable with capacitive loads of more than 1000 pF with no external compensation.

The inputs of the ADA4177-1/ADA4177-2/ADA4177-4 feature outstanding precision amplifier robustness, providing input protection against signal excursions 32 V beyond either supply, as well as 70 dB of rejection for electromagnetic interference (EMI) at 1000 MHz.

Applications for these amplifiers include sensor signal conditioning (such as thermocouples, resistor thermal detectors (RTDs), and strain gages), process control front-end amplifiers, and precision diode power measurement in optical and wireless transmission systems.

The ADA4177-1/ADA4177-2/ADA4177-4 operate over the -40° C to $+125^{\circ}$ C industrial temperature range. The ADA4177-1/ADA4177-2 are available in an 8-lead SOIC package and an 8-lead MSOP package. The ADA4177-4 is available in a 14-lead TSSOP and a 14-lead SOIC package.

Features

Low offset voltage: 60 μV maximum at 25°C (8-lead and 14-lead SOIC)

Low offset voltage drift: 1 $\mu\text{V}/^\circ\text{C}$ maximum (8-lead and 14-lead SOIC)

Low input bias current: 1 nA maximum at 25°C

Low voltage noise density: 8 nV/ $\sqrt{\text{Hz}}$ typical at 1 kHz

Large signal voltage gain (AVO): 100 dB minimum over full supply voltage and operating temperature

Input overvoltage protection to 32 V above and below the supply voltage rail

Integrated EMI filter

70 dB typical rejection at 1000 MHz

90 dB typical rejection at 2400 MHz

Rail-to-rail output swing

Low supply current: 500 μA typical per amplifier

Wide bandwidth

Gain bandwidth product >

Unity-gain crossover >

Dual-supply operation

Specified at $\pm 5\text{ V}$ to $\pm 15\text{ V}$, operates over $\pm 2.5\text{ V}$ to $\pm 18\text{ V}$

Unity-gain stable

No phase reversal

Long-term offset voltage drift (10,000 hours): 2 μV typical

Temperature hysteresis: 2 μV typical

Application

Wireless base station control circuits

Optical network control circuits

Instrumentation

Sensors and controls

Thermocouples, RTDs, strain gages, shunt current measurements

Related Products



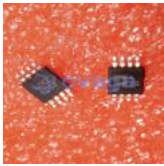
[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8567ARUZ](#)

Analog Devices, Inc
TSSOP-14



[AD8628AUJZ](#)

Analog Devices, Inc
SOP23



[AD8022ARMZ](#)

Analog Devices, Inc
MSOP-8



[AD8041AR](#)

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SOP-8