



Data Sheet

Operational Amplifier, Dual, 2 Amplifier, 10 MHz, 2.5 V/ μ s, \pm 5V to \pm 18V, SOIC, 8 Pins

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

Package/Case SOIC-8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD8676ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD8676 precision operational amplifier offers ultralow offset, drift, and voltage noise combined with very low input bias currents over the full operating temperature range. The AD8676 is a precision, wide bandwidth op amp featuring rail- to-rail output swings and very low noise. Operation is fully specified from $\pm 5~\rm V$ to $\pm 15~\rm V$.

The AD8676 features a rail-to-rail output like that of the OP184, but with wide bandwidth and even lower voltage noise, com-bined with the precision and low power consumption like that of the industry-standard OP07 amplifier. Unlike other low noise, rail-to-rail op amps, the AD8676 has very low input bias current and low input current noise.

With typical offset voltage of only $12~\mu\text{V}$, offset drift of $0.2~\mu\text{V}/^{\circ}\text{C}$, and noise of only $0.10~\mu\text{V}$ p-p (0.1~Hz to 10~Hz), the AD8676 is perfectly suited for applications where large error sources cannot be tolerated. Precision instrumentation, PLL and other precision filter circuits, position and pressure sensors, medical instrumentation, and strain gage amplifiers benefit greatly from the very low noise, low input bias current, and wide bandwidth. Many systems can take advantage of the low noise, dc precision, and rail-to-rail output swing provided by the AD8676 to maxi-mize SNR and dynamic range.

The smaller packages and low power consumption afforded by the AD8676 allow maximum channel density or minimum board size for space-critical equipment.

The AD8676 is specified for the extended industrial temperature range (-40° C to $+125^{\circ}$ C). The AD8676 is available in the 8-lead MSOP, and the popular 8-lead, narrow SOIC; both of which are lead-free packages. MSOP packaged devices are only available in tape and reel format.

For the single version of this ultraprecision, rail-to-rail op amp, see the AD8675 data sheet.

The AD8675 and AD8676 are members of a growing series of low noise op amps offered by Analog Devices, Inc.

Features

Very low voltage noise 2.8 nV/\day{Hz @ 1 kHz

Rail-to-rail output swing

Low input bias current: 2 nA maximum

Very low offset voltage: $12 \mu V$ typical

Low input offset drift: $0.6 \,\mu\text{V/}^{\circ}\text{C}$ maximum

Very high gain: 120 dB

Wide bandwidth: 10 MHz typical

Application

Precision instrumentation

PLL filters

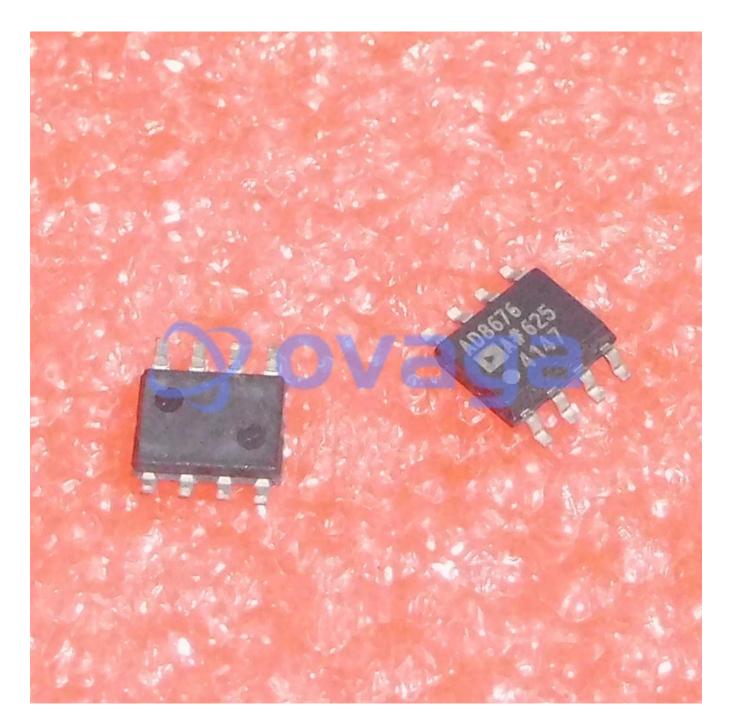
Laser diode control loops

Strain gage amplifiers

Medical instrumentation

Thermocouple amplifiers





Related Products



AD8418BRMZ-RL
Analog Devices, Inc
MSOP-8



ADA4084-2ARMZ
Analog Devices, Inc
MSOP-8



Man Man

ADA4528-2ARMZ-R7
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