

## AD8226ARMZ-R7

Data Sheet

Wide Supply Range, Rail-to-Rail Output Instrumentation Amplifier -...

Manufacturers Analog Devices, Inc

Package/Case MSOP-8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD8226ARMZ-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD8226 is a low cost, wide supply range instrumentation amplifier that requires only one external resistor to set any gain between 1 and 1000.

The AD8226 is designed to work with a variety of signal voltages. A wide input range and rail-to-rail output allow the signal to make full use of the supply rails. Because the input range also includes the ability to go below the negative supply, small signals near ground can be amplified without requiring dual supplies. The AD8226 operates on supplies ranging from  $\pm 1.35$  V to  $\pm 18$  V for dual supplies and 2.2 V to 36 V for single supply.

The robust AD8226 inputs are designed to connect to real-world sensors. In addition to its wide operating range, the AD8226 can handle voltages beyond the rails. For example, with a  $\pm 5$  V supply, the part is guaranteed to withstand  $\pm 35$  V at the input with no damage. Minimum as well as maximum input bias currents are specified to facilitate open wire detection.

The AD8226 is perfect for multichannel, space-constrained industrial applications. Unlike other low cost, low power instrumentation amplifiers, the AD8226 is designed with a minimum gain of 1 and can easily handle  $\pm 10 \text{ V}$  signals. With its MSOP package and 125°C temperature rating, the AD8226 thrives in tightly packed, zero airflow designs.

The AD8226 is available in 8-lead MSOP and SOIC packages, and is fully specified for -40°C to +125°C operation.

For a device with a similar package and performance as the AD8226 but with gain settable from 5 to 1000, consider using the AD8227.

**Features** 

Gain set with 1 external resistor

Gain range: 1 to 1000

Input voltage goes below ground

Inputs protected beyond supplies

Very wide power supply range

Single supply: 2.2 V to 36 V

Dual supplies:  $\pm 1.35~V$  to  $\pm 18~V$ 

Bandwidth>

CMRR>

Input noise:  $22 \text{ nV}/\sqrt{\text{Hz}}$ 

Typical supply current:  $350 \mu A$ 

Specified temperature: -40°C to +125°C

8-lead SOIC and MSOP packages

## **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

## **Application**

Industrial process controls

Bridge amplifiers

Medical instrumentation

Portable data acquisition

Multichannel systems



ADA4528-2ARMZ-R7
Analog Devices, Inc
MSOP-8



AD8062ARMZ
Analog Devices, Inc
MSOP8



AD8628AUJZ
Analog Devices, Inc
SOP23



AD8041AR
Analog Devices, Inc
SOP-8