

AD8476BRMZ

Data Sheet

Differential Amplifier, Unity-Gain, 1 Amplifiers, 5 MHz, -40 °C, 125 °C

Manufacturers Analog Devices, Inc

Package/Case MSOP8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD8476BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD8476 is a very low power, fully differential precision amplifier with integrated gain resistors for unity gain. It is an ideal choice for driving low power, high performance ADCs as a single-ended-to-differential or differential-to-differential amplifier. It provides a precision gain of 1, common-mode level shifting, low temperature drift, and rail-to-rail outputs for maximum dynamic range.

The AD8476 also provides overvoltage protection from large industrial input voltages up to ± 23 V while operating on a dual 5 V supply. Power dissipation on a single 5 V supply is only 1.5 mW.

The AD8476 works well with SAR, Σ - Δ , and pipeline converters. The high current output stage of the part allows it to drive the switched capacitor front-end circuits of many ADCs with minimal error.

Unlike many differential drivers on the market, the AD8476 is a high precision amplifier. With 200 μ V maximum output offset, 39 nV/ $\sqrt{\text{Hz}}$ noise, and -102 dB THD + N at 10 kHz, the AD8476 pairs well with low power, high accuracy converters.

Considering its low power consumption and high precision, the slew-enhanced AD8476 has excellent speed, settling to 16-bit precision for 250 kSPS acquisition times.

The AD8476 is available in a space-saving 8-lead MSOP package. It is fully specified over the -40°C to +125°C temperature range.

Features

Very low power- 330 µA supply current

Fully differential or single-ended inputs/outputs

Differential output designed to drive precision ADCs- Drives switched capacitor and Σ - Δ ADCs- Rail-to-rail output

VOCM pin adjusts output common mode

Robust overvoltage up to 18 V beyond supplies

High performance- Suitable for driving 16-bit converter up to 250 kSPS- $39 \text{ nV/}\sqrt{\text{Hz}}$ output noise- $1 \text{ ppm/}^{\circ}\text{C}$ gain drift- $200 \,\mu\text{V}$ maximum output offset- $10 \,\text{V/}\mu\text{s}$ slew rate- $5 \,\text{MHz}$ bandwidth

Single supply: 3 V to 18 V

Dual supplies: $\pm 1.5 \text{ V}$ to $\pm 9 \text{ V}$

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



ADC driver

Differential instrumentation amplifier building block

Single-ended-to-differential converter

Battery powered instruments



Analog Devices, Inc

MSOP-8

AD8062ARMZ

Analog Devices, Inc MSOP8

AD8628AUJZ

Analog Devices, Inc SOP23

AD8041AR

Analog Devices, Inc

SOP-8