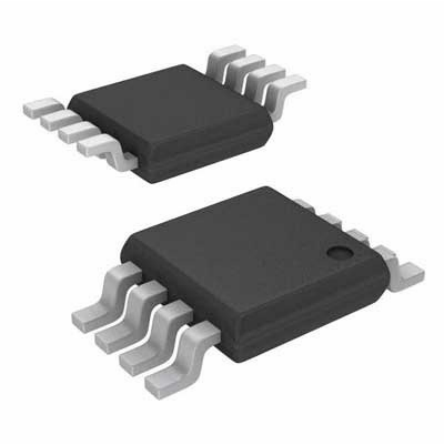
AD8276ARMZ

Data Sheet

Differential Amplifier, Unity-Gain, 1 Amplifiers, 100 µV, 550 kHz, -40 °C, 85 °C

Manufacturers	Analog Devices, Inc
Package/Case	8-MSOP
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8276ARMZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD8276/AD8277 are general-purpose, unity-gain difference amplifiers intended for precision signal conditioning in power critical applications that require both high performance and low power. They provide exceptional 86 dB common-mode rejection ratio (CMRR) and high bandwidth while amplifying signals well beyond the supply rails. The on-chip resistors are laser trimmed for gain drift of 1 ppm/°C and high CMRR. The AD8276/AD8277 also have extremely low gain drift vs. temperature.

The common-mode range of the amplifiers extends to almost double the supply voltage, making these amplifiers ideal for single-supply applications that require a high common-mode voltage range. The internal resistors and electrostatic discharge (ESD) circuitry at the inputs also provide overvoltage protection to the op amps.

The AD8276/AD8277 are unity-gain stable. Although they are optimized for use as difference amplifiers, they can also be connected in high precision, single-ended configurations with>

The AD8276/AD8277 operate on single supplies (2.0 V to 36 V) or dual supplies (±2 V to ±18 V). The maximum quiescent supply current is 200 µA per channel, which is ideal for battery-operated and portable systems.

The AD8276 is available in the space-saving 8-lead mini small outline package (MSOP) and the standard small outline (SOIC) package, as well as in die form, and the AD8277 is offered in a 14-lead SOIC package. Both are specified for performance over the industrial temperature range of −40°C to +85°C and are fully RoHS compliant.

Features

Wide input range beyond supplies

Rugged input overvoltage protection

Low supply current: 200 µA maximum per channel

Low power dissipation: 0.54 mW at>

Bandwidth: 550 kHz

CMRR: 86 dB minimum, dc to 10 kHz

System offset voltage: ±2 µV/°C maximum (B Grade)

Low gain drift: 1 ppm/°C maximum (B Grade)

Enhanced slew rate: 1.1 V/µs

Wide power supply range

Single supply: 2.0 V to 36 V

Dual supplies: ±2 V to ±18 V

Application

Voltage measurement and monitoring

Current measurement and monitoring

Differential output instrumentation amplifier

Portable, battery-powered equipment

Test and measurement

Related Products

AD8418BRMZ-RL

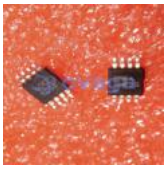
Analog Devices, Inc

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

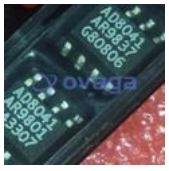
Analog Devices, Inc

SOP23

AD8022ARMZ

Analog Devices, Inc

MSOP-8



AD8041AR

Analog Devices, Inc

SOP-8