

AD827AQ

Data Sheet

Analog Devices,, Op Amp, 50MHz, 8-Pin PDIP

Manufacturers	Analog Devices, Inc	
Package/Case	CDIP-8	2) mvmga
Product Type	Amplifier ICs	
RoHS		*
Lifecycle		Images are for reference only

Please submit RFQ for AD827AQ or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

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 μ A 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 $+85^{\circ}$ C and are fully RoHS compliant.

Features

- Wide input range beyond supplies
- Rugged input overvoltage protection
- Low supply current: 200 μ A maximum per channel
- Low power dissipation: 0.54 mW at>
- Bandwidth: 550 kHz
- CMRR: 86 dB minimum, dc to 10 kHz
- System offset voltage: $\pm 2 \mu V/^{\circ}C$ 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: $\pm 2 \text{ V}$ to $\pm 18 \text{ V}$



Related Products

Application

Voltage measurement and monitoring

- Current measurement and monitoring
- Differential output instrumentation amplifier
- Portable, battery-powered equipment
- Test and measurement



AD8418BRMZ-RL

Analog Devices, Inc MSOP-8



ADA4528-2ARMZ-R7

Analog Devices, Inc MSOP-8



ADA4084-2ARMZ

Analog Devices, Inc MSOP-8



AD8567ARUZ

Analog Devices, Inc TSSOP-14



AD8022ARMZ

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



AD8628AUJZ

Analog Devices, Inc SOP23



<u>AD8041AR</u>

Analog Devices, Inc SOP-8