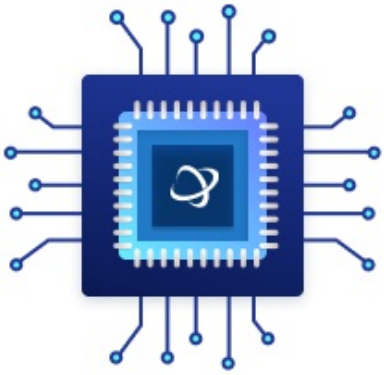
AD8244BRMZ

Data Sheet

Operational Amplifier, Quad, 4 Amplifier, 3.6 MHz, 0.8 V/µs, 3V to 36V, ± 1.5V to ± 18V, MSOP

Manufacturers	Analog Devices, Inc
Package/Case	RM-10
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8244BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

Many traditional operational amplifier pinouts have a supply pin that is next to the noninverting input. A guard trace must be routed between these pins to avoid leakage currents much larger than the bias current of a FET input op amp. Guard traces can be routed between pins for large packages, such as DIP or even SOIC; however, the board area consumed by these packages is prohibitive for many modern applications. The AD8244 solves this problem with a unique pinout that physically separates the high impedance inputs from the low impedance supplies and outputs of the other buffers. This configuration simplifies guarding while reducing board space, allowing high performance and high density in the same design.

The AD8244 design is focused on solving problems specific to buffers. This includes close channel-to-channel matching which allows channels of the AD8244 to be used in differential signal chains with minimal error. With its low voltage noise, wide supply range, and high precision, the AD8244 is also flexible enough to provide high performance anywhere a unity-gain buffer is needed, even with low source resistance.

The AD8244 is specified over the industrial temperature range of −40°C to +85°C. It is available in a 10-lead MSOP package.

Features

Low power250 µA maximum supply current per amplifier

FET input2 pA maximum input bias current at 25°CExtremely high input impedance

Low noise13 nV/√Hz voltage noise at 1 kHz0.4 µV p-p voltage noise (0.1 Hz to 10 Hz)0.8 fA/√Hz current noise at 1 kHz

High dc precision3 µV/°C maximum offset drift(B grade)

3 MHz bandwidth

Unique pinoutNo leakage from inputs to supply pinsProvides guarding capability

Rail-to-rail output

Single-supply operationInput range extends to ground

Wide supply rangeSingle-supply: 3 V to 36 VDual-supply: ±1.5 V to ±18 V

Available in a compact 10-lead MSOP

Application

Biopotential electrodes

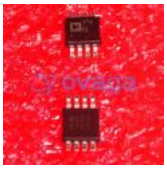
Medical instrumentation

High impedance sensor conditioning

Filters

Photodiode amplifiers

Related Products



AD8418BRMZ-RL

Analog Devices, Inc

MSOP-8

ADA4528-2ARMZ-R7

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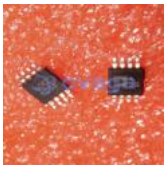
MSOP-8



ADA4084-2ARMZ

Analog Devices, Inc

MSOP-8

AD8062ARMZ

Analog Devices, Inc

MSOP8

AD8567ARUZ

Analog Devices, Inc

TSSOP-14

AD8628AUJZ

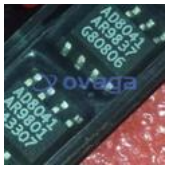
Analog Devices, Inc

SOP23

AD8022ARMZ

Analog Devices, Inc

MSOP-8



AD8041AR

Analog Devices, Inc

SOP-8