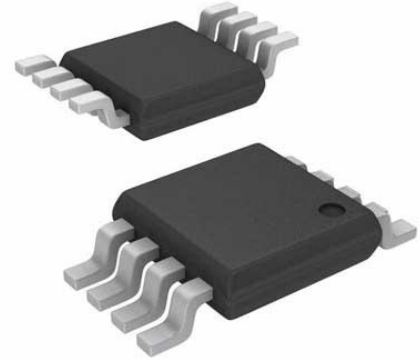


High Voltage, Precision Difference Amplifier; No of Pins: 8; Temperature Range: Ind

Manufacturers	Analog Devices, Inc
Package/Case	MSOP8
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for AD8209WBRMZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The AD8209 is a single-supply difference amplifier ideal for amplifying and low-pass filtering small differential voltages in the presence of a large common-mode voltage. The input common-mode voltage range extends from -2 V to $+45\text{ V}$ at a single $+5\text{ V}$ supply. The AD8209 is qualified per AEC-Q100 specifications. The amplifier offers enhanced input overvoltage and ESD protection, and includes EMI filtering.

Automotive applications demand robust, precision components for improved system control. The AD8209 provides excellent ac and dc performance, minimizing errors in the application. Typical offset and gain drift in the MSOP package are less than $5\text{ }\mu\text{V}/^\circ\text{C}$ and $10\text{ ppm}/^\circ\text{C}$, respectively. The device also delivers a minimum CMRR of 80 dB from dc to 10 kHz.

The AD8209 features an externally accessible $100\text{ k}\Omega$ resistor at the output of the preamplifier (A1), which can be used for low-pass filtering and for establishing gains other than 14.

Applications

High-side current sensing

– Motor controls– Solenoid controls– Power management

Low-side current sensing

Diagnostic protection

Features

AEC-Q100 qualified

EMI filters included

High common-mode voltage range

Buffered output>

Low-pass filter (single-pole or two-pole)

Wide operating temperature range

Excellent ac and dc performance

80 dB CMRR minimum dc to 10 kHz

Qualified for automotive applications

Application

High-side current sensing

Low-side current sensing

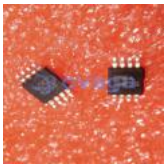
Diagnostic protection

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



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
MSOP-8



[AD8062ARMZ](#)

Analog Devices, Inc
MSOP8



[AD8628AUJZ](#)

Analog Devices, Inc
SOP23



[AD8041AR](#)

Analog Devices, Inc
SOP-8