

AD8418BRMZ

Data Sheet

Current Sense Amplifier, Bidirectional, 1 Amplifier, 130 µA, MSOP, 8 Pins, -40 °C, 125 °C

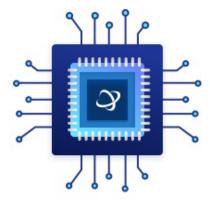
Manufacturers <u>Analog Devices, Inc</u>

Package/Case RM-8

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for AD8418BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD8418A is a high voltage, high resolution current shunt amplifier. It features an initial gain of 20 V/V, with a maximum $\pm 0.15\%$ gain error over the entire temperature range. The buffered output voltage directly interfaces with any typical converter. The AD8418A offers excellent input common-mode rejection from -2 V to +70 V. The AD8418A performs bidirectional current measurements across a shunt resistor in a variety of automotive and industrial applications, including motor control, power management, and solenoid control.

The AD8418A offers breakthrough performance throughout the -40° C to $+150^{\circ}$ C temperature range. It features a zero drift core, which leads to a typical offset drift of $0.1~\mu\text{V/°C}$ throughout the operating temperature range and the common-mode voltage range. The AD8418A is qualified for automotive applications. The device includes EMI filters and patented circuitry to enable output accuracy with pulse-width modulation (PWM) type input common-mode voltages. The typical input offset voltage is $\pm 100~\mu\text{V}$. The AD8418A is offered in 8-lead MSOP and SOIC packages.

Features

Typical $0.1 \mu V/^{\circ}C$ offset drift

Maximum $\pm 200~\mu V$ voltage offset over full temperature range

2.7 V to 5.5 V power supply operating range

Electromagnetic interference (EMI) filters included

High common-mode input voltage range

Minimum DC common-mode rejection ratio (CMRR): 90 dB

Initia⊳

Wide operating temperature range

AD8418AWB: -40°C to +125°C

AD8418AWH: -40° C to $+150^{\circ}$ C

Bidirectional operation

Available in 8-lead SOIC and 8-lead MSOP

Qualified for automotive applications

lich aide armment acre

Application

High-side current sensing in

Motor controls

Solenoid controls

Power management

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