

## **AD8417BRMZ**

Data Sheet

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

Manufacturers

Analog Devices, Inc

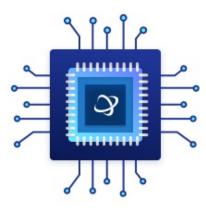
Package/Case

RM-8

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for AD8417BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD8417 is a high voltage, high resolution current shunt amplifier. It features an initial gain of 60 V/V, with a maximum  $\pm 0.3\%$  gain error over the entire temperature range. The buffered output voltage directly interfaces with any typical converter. The AD8417 offers excellent input common-mode rejection from -2 V to +70 V. The AD8417 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 AD8417 offers breakthrough performance throughout the  $-40^{\circ}$ C to  $+150^{\circ}$ C temperature range. It features a zero drift core, which leads to a typical offset drift of  $0.1~\mu\text{V}/^{\circ}$ C throughout the operating temperature range and the common-mode voltage range. The AD8417 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  $\pm 200~\mu\text{V}$ . The AD8417 is offered in 8-lead MSOP and SOIC packages.

**Features** 

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

Maximum  $\pm 400 \,\mu V$  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

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Wide operating temperature range

AD8417WB: -40°C to +125°C

AD8417WH: -40°C to +150°C

Bidirectional operation

Available in 8-lead SOIC and 8-lead MSOP

Common-mode rejection ratio (CMRR): 86 dB, dc to 10 kHz

Qualified for automotive applications

## **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



High-side current sensing in

Motor controls

Solenoid controls

Power management

Low-side current sensing

Diagnostic protection



**ADA4528-2ARMZ-R7** 

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



AD8628AUJZ

Analog Devices, Inc

SOP23



**AD8041AR** 

Analog Devices, Inc

SOP-8