

AD8417WBRMZ

99090

Data Sheet

<u>RFO</u>

| Current Sense Amplifier, Bidirectional, 1 Amplifier, 13 | 30 μA, MSOP, 8 Pins, -40 °C, 125 °C |
|---|-------------------------------------|
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| Manufacturers | Analog Devices, Inc | |
|---------------|---------------------|-------------------------------|
| Package/Case | RM-8 | |
| Product Type | Amplifier ICs | |
| RoHS | Pb-free Halide free | |
| Lifecycle | | Images are for reference only |
| | | |

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.

Please submit RFQ for AD8417WBRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

The AD8417 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 μ V/°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 $\pm 200 \ \mu$ V. The AD8417 is offered in 8-lead MSOP and SOIC packages.

Features

Typical 0.1 µV/°C offset drift

Maximum $\pm400~\mu V$ voltage offset over full temperature range

 $2.7~\mathrm{V}$ to $5.5~\mathrm{V}$ 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





AD8022ARMZ Analog Devices, Inc MSOP-8





Analog Devices, Inc MSOP-8

AD8062ARMZ



Analog Devices, Inc MSOP8

AD8628AUJZ

Analog Devices, Inc SOP23



<u>AD8041AR</u>

Analog Devices, Inc SOP-8

Application

High-side current sensing in

Motor controls

Solenoid controls

Power management

Low-side current sensing

Diagnostic protection