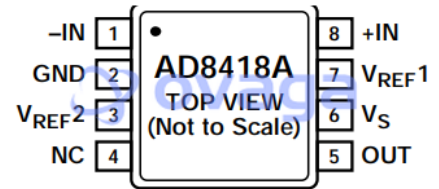


Current Sense Amplifiers High Common Mode Cur Sense -3V to 80V

Manufacturers	Analog Devices, Inc
Package/Case	SOIC-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for AD8418AWBRZ-RL or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

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 $+150^{\circ}\text{C}$ temperature range. It features a zero drift core, which leads to a typical offset drift of $0.1 \mu\text{V}/^{\circ}\text{C}$ 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 $0.1 \mu\text{V}/^\circ\text{C}$ offset drift

Maximum $\pm 200 \mu\text{V}$ 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

Initial

Wide operating temperature range

AD8418AWB: -40°C to $+125^\circ\text{C}$

AD8418AWH: -40°C to $+150^\circ\text{C}$

Bidirectional operation

Available in 8-lead SOIC and 8-lead MSOP

Qualified for automotive applications

Application

High-side current sensing in

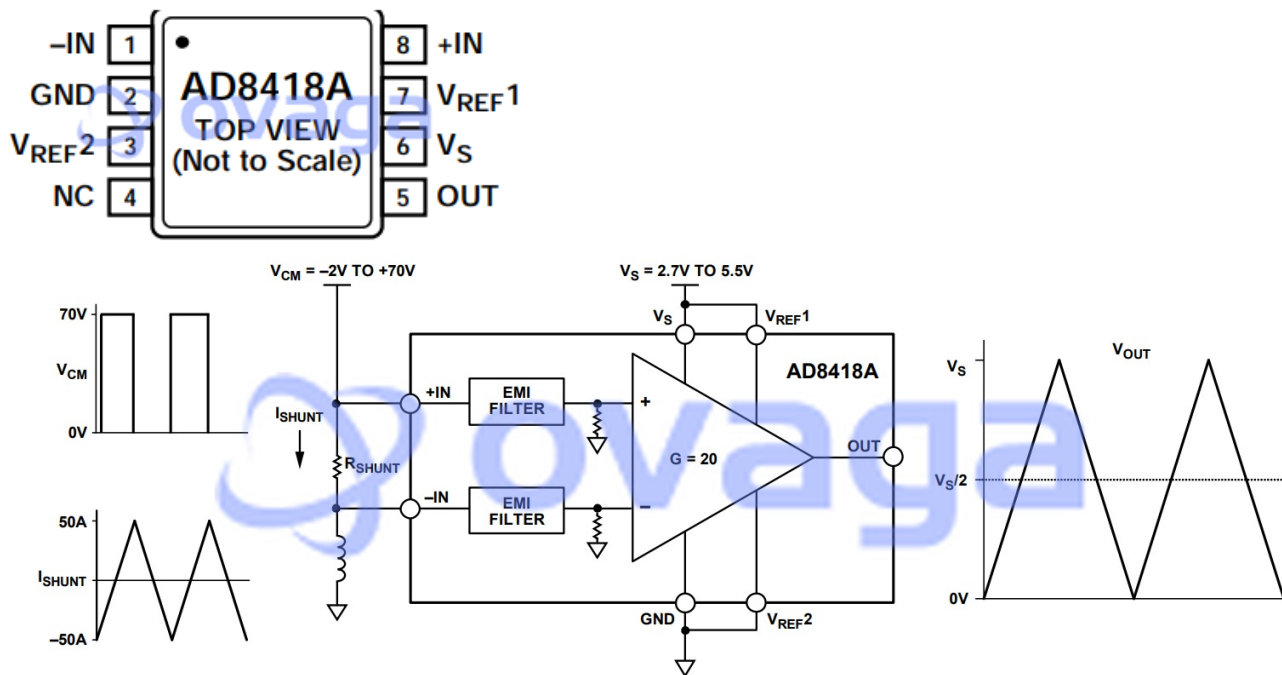
Motor controls

Solenoid controls

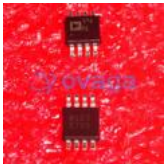
Power management

Low-side current sensing

Diagnostic protection



Related Products



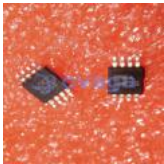
[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

Analog Devices, Inc
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