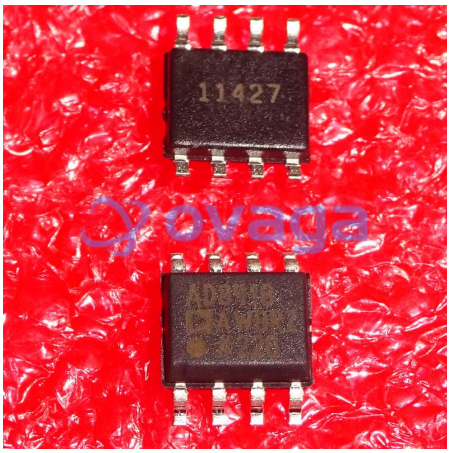
# AD8418AWBRZ

Data Sheet

ANALOG DEVICES AD8418AWBRZ current sense amplifier, bidirectional, AEC-Q100, 1 amplifier, 130 µA, NSOIC, 8-pin, -40 °C, 125 °C

| | |
|---|---|
| Manufacturers | Analog Devices, Inc |
| Package/Case | SOP8 |
| Product Type | Amplifier ICs |
| RoHS | Pb-free Halide free |
| Lifecycle | |




Images are for reference only

Please submit RFQ for AD8418AWBRZ or Email to us: 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 ±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°C temperature range. It features a zero drift core, which leads to a typical offset drift of 0.1 µV/°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 ±100 µV. The AD8418A is offered in 8-lead MSOP and SOIC packages.

## Features

Typical 0.1 µV/°C offset drift

Maximum ±200 µV 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°C

AD8418AWH: −40°C to +150°C

Bidirectional operation

Available in 8-lead SOIC and 8-lead MSOP

Qualified for automotive applications

## Application

High-side current sensing in

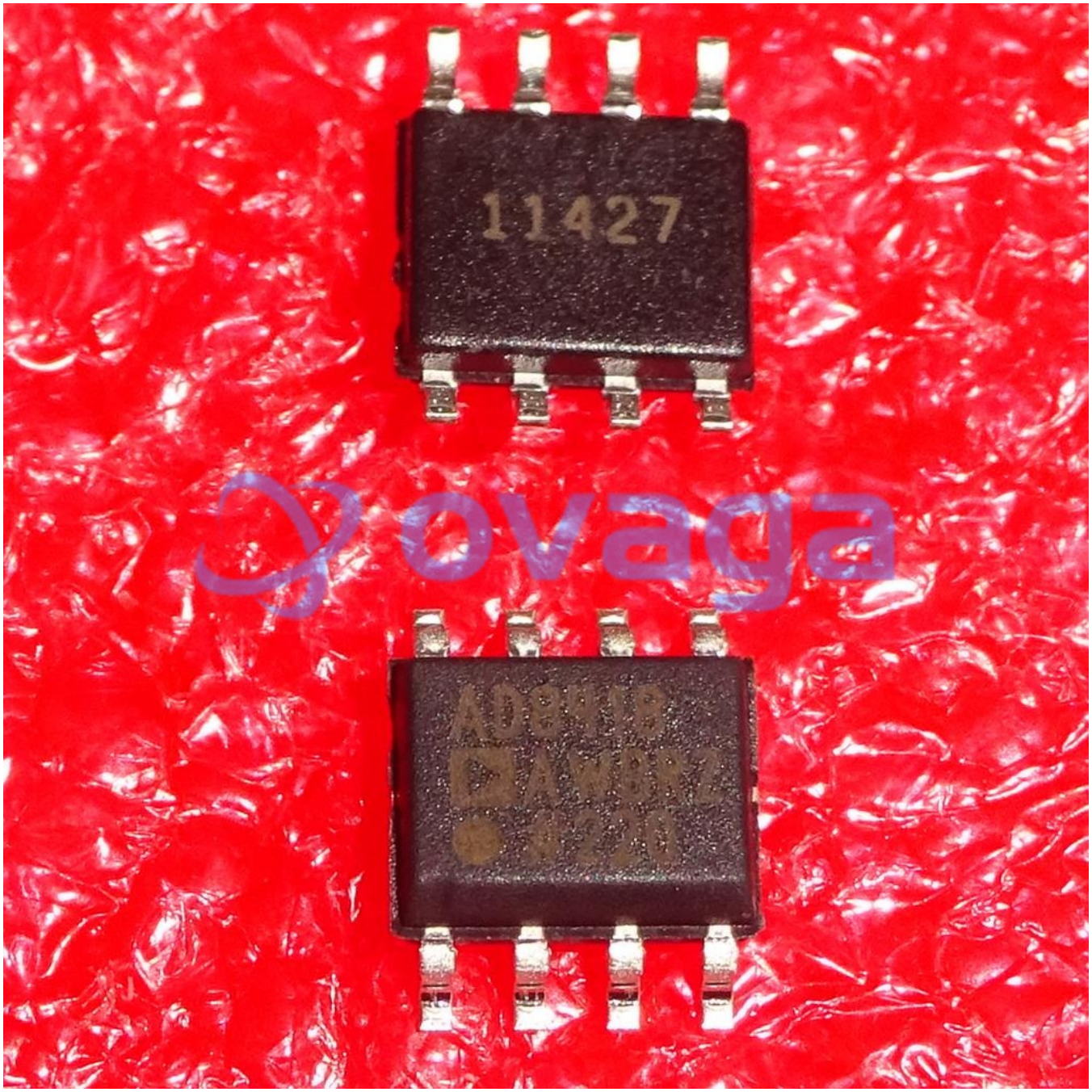
Motor controls

Solenoid controls

Power management

Low-side current sensing

Diagnostic protection




**Related Products**

[AD8418BRMZ-RL](#)

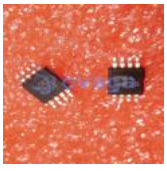
Analog Devices, Inc

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