

## AD8218BRMZ

Data Sheet

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

Manufacturers Analog Devices, Inc

Package/Case MSOP-8

Product Type Specialty Amplifiers; Current Sense Amplifiers

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD8218BRMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD8218 is a high voltage, high resolution current shunt amplifier. It features a set gain of 20 V/V, with a maximum  $\pm 0.35\%$  gain error over the entire temperature range. The buffered output voltage directly interfaces with any typical converter. The AD8218 offers excellent input common-mode rejection from 4 V to 80 V. The AD8218 performs bidirectional current measurements across a shunt resistor in a variety of industrial and telecom applications, including motor control, battery management, and base station power amplifier bias control.

The AD8218 offers breakthrough performance throughout the  $-40^{\circ}$ C to  $+125^{\circ}$ C temperature range. It features a zero-drift core, which leads to a typical offset drift of  $\pm 100$  nV/°C throughout the operating temperature range and the common-mode voltage range. Special attention is devoted to output linearity being maintained throughout the input differential voltage range of 0 mV to  $\sim 250$  mV. The AD8218 also includes an internal 80 mV reference that can be enabled for optimal dynamic range in unidirectional current sense applications. The typical input offset voltage is  $\pm 50$   $\mu$ V.

The AD8218 is offered in an 8-lead MSOP package.

Applications
High-side current sensing
48V telecom

Power Management

Base Stations

Bidirectional motor control

Precision high voltage current sources

## **Features**

High common-mode voltage range-- 4 V to 80 V operating-- -0.3 V to 85 V survival

High-side current sensing

Buffered output>

48V telecom

**Application** 

Wide operating temperature range:-40°C to +125°C

Power Management

Excellent ac and dc performance--  $\pm 100$  nV/°C typical offset drift--  $\pm 50$   $\mu$ V typical offset--  $\pm 5$  ppm/°C typical gain Base Stations drift-- 110 dB typical CMRR at dc

Bidirectional motor control

Precision high voltage current sources

## **Related Products**



ADP3336ARMZ-REEL7

Analog Devices, Inc MSOP-8



ADP3367ARZ

Analog Devices, Inc

SOIC-8



ADP3330ARTZ3.3-RL7

Analog Devices, Inc

SOT-23-6



ADR421ARZ

Analog Devices, Inc

SOP-8



AD737JRZ

Analog Devices, Inc

SOP-8



<u>AD636JH</u>

Analog Devices, Inc

TO-100-10



ADR434BRZ

Analog Devices, Inc

SOIC-8



ADR3412ARJZ-R7

Analog Devices, Inc

SOT-23-6