

## LT6100IMS8#TRPBF

Data Sheet

Precision, Gain Selectable High Side Current Sense Amplifier; Package: MSOP; No of Pins: 8; Temperature Range: -40°C to +85°C

Manufacturers <u>Analog Devices, Inc</u>

Package/Case MSOP8

Product Type Amplifier ICs

RoHS Green

Lifecycle



Images are for reference only

Please submit RFQ for LT6100IMS8#TRPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LT6100 is a complete micropower, precision, high side current sense amplifier. The LT6100 monitors unidirectional currents via the voltage across an external sense resistor. Fixed gains of 10, 12.5, 20, 25, 40, 50V/V are obtained by simply strapping or floating two gain select pins. Gain accuracy is better than 0.5% for all gains.

The LT6100 sense inputs have a voltage range that extends from 4.1V to 48V, and can withstand a differential voltage of the full supply. This makes it possible to monitor the voltage across a MOSFET switch or a fuse. The part can also withstand a reverse battery condition on the inputs.

Input offset is a low  $300\mu$ V. CMRR and PSRR are in excess of 105dB, resulting in a wide dynamic range. A filter pin is provided to easily implement signal filtering with a single capacitor.

The LT6100 has a separate supply input, which operates from 2.7V to 36V and draws only  $60\mu A$ . When VCC is powered down, the sense pins are biased off. This prevents loading of the monitored circuit, irrespective of the sense voltage. The LT6100 is available in an 8-lead DFN and MSOP package.

**Features** 

Input Offset Voltage: 300µV (Max)

Sense Inputs Up to 48V

0.5% Gain Accuracy

Pin Selectable Gain: 10, 12.5, 20, 25, 40, 50V/V

Separate Power Supply: 2.7V to 36V

Operating Current: 60µA

Sense Input Current (VCC Powered Down): 1nA

Reverse Battery Protected to -48V

**Buffered Output** 

Noise Filtering Input

Available in 8-Lead DFN and MSOP Packages

## **Application**

**Battery Monitoring** 

Fuse Monitoring

Portable and Cellular Phones

Portable Test/Measurement Systems

## **Related Products**



LTC1151CSW#PBF
Analog Devices, Inc

SOIC-16



LTC2053CMS8

Analog Devices, Inc

MSOP8



**LT1491ACS** 

Analog Devices, Inc

SOP14



LTC1150CS8

Analog Devices, Inc

SOP8



LT1498CS8

Analog Devices, Inc

SOP-8



LTC1150CN8

Analog Devices, Inc

DIP8



LT6105IMS8

Analog Devices, Inc

MSOP-8



LT1013CN8

Analog Devices, Inc

DIP-8