

## LTC6101AIMS8#PBF

Data Sheet

High Voltage, High-Side Current Sense Amplifier in SOT-23; Package: SO; No of Pins: 8; Temperature Range:  $-40^{\circ}$ C to  $+85^{\circ}$ C

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

Package/Case MSOP8

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC6101AIMS8#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The LTC6101/LTC6101HV are versatile, high voltage, high side current sense amplifiers. Design flexibility is provided by the excellent device characteristics;  $300\mu V$  Max offset and only  $375\mu A$  (typical at 60V) of current consumption. The LTC6101 operates on supplies from 4V to 60V and LTC6101HV operates on supplies from 5V to 100V.

The LTC6101 monitors current via the voltage across an external sense resistor (shunt resistor). Internal circuitry converts input voltage to output current, allowing for a small sense signal on a high common mode voltage to be translated into a ground referenced signal. Low DC offset allows the use of a small shunt resistor and large gain-setting resistors. As a result, power loss in the shunt is reduced.

The wide operating supply range and high accuracy make the LTC6101 ideal for a large array of applications from automotive to industrial and power management. A maximum input sense voltage of 500mV allows a wide range of currents to be monitored. The fast response makes the LTC6101 the perfect choice for load current warnings and shutoff protection control. With very low supply current, the LTC6101 is suitable for power sensitive applications.

The LTC6101 is available in 5-lead SOT-23 and 8-lead MSOP packages.

**Features** 

Supply Range:

5V to 100V, 105V Absolute Maximum (LTC6101HV)

4V to 60V, 70V Absolute Maximum (LTC6101)

Low Offset Voltage: 300µV Max

Fast Response: 1 µs Response Time (0V to 2.5V on a 5V Output Step)

Gain Configurable with 2 Resistors

Low Input Bias Current: 170nA Max

PSRR: 118dB Min

Output Current: 1mA Max

Low Supply Current: 250µA,>

Specified Temperature Range: -40°C to 125°C

Operating Temperature Range: -55°C to 125°C

Low Profi le (1mm) SOT-23 (ThinSOTTM) Package

## **Related Products**



LTC1151CSW#PBF
Analog Devices, Inc

SOIC-16



**LTC2053CMS8** 

Analog Devices, Inc

MSOP8



LT1491ACS

Analog Devices, Inc

SOP14



LTC1150CS8

Analog Devices, Inc

SOP8



Current Shunt Measurement

**Battery Monitoring** 

Remote Sensing

Power Management



LT1498CS8

Analog Devices, Inc

SOP-8



LTC1150CN8

Analog Devices, Inc

DIP8



**LT6105IMS8** 

Analog Devices, Inc

MSOP-8



**LT1013CN8** 

Analog Devices, Inc

DIP-8