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## LT6107MPS5#TRMPBF

Data Sheet

Current Sense Amplifier, High Temperature, 1 Amplifier, 0.04  $\mu A,$  TSOT-23, 5 Pins, -55 °C, 150 °C

Manufacturers	Analog Devices, Inc
Package/Case	SOT23-5
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LT6107MPS5#TRMPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

### **General Description**

The LT6107 is a versatile high side current sense amplifier designed for operation over a wide temperature range. Design flexibility is provided by the excellent device characteristics:  $250\mu$ V maximum offset and 40nA maximum input bias current. Gain for each device is set by two resistors and allows for accuracy better than 1%. The LT6107 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. The low DC offset allows for monitoring very small sense voltages. As a result, a small valued shunt resistor can be used, which minimizes the power loss in the shunt. The wide 2.7V to 44V input voltage range, high accuracy and wide operating temperature range make the LT6107 ideal for automotive, industrial and power management applications. The very low power supply current of the LT6107 also makes it suitable for low power and battery operated applications. For applications not requiring the wide temperature range, see the LT6106.

## Features

Fully Tested at  $-55^{\circ}C$  (MP),  $-40^{\circ}C$  (H),  $25^{\circ}C$  and  $150^{\circ}C$ 

Gain Configurable with Two Resistors

Low Offset Voltage: 250µV Maximum

Output Current: 1mA Maximum

Supply Range: 2.7V to 36V, 44V Absolute Maximum

Low Input Bias Current: 40nA Maximum

PSRR: 106dB Minimum

Low Supply Current:  $65\mu A$  Typical, V+ = 12V

Low Profile (1mm) ThinSOT<sup>TM</sup> Package

## Application

Current Shunt Measurement

Battery Monitoring

Power Management

Motor Control

Lamp Monitoring

Overcurrent and Fault Detection



#### **Related Products**



LTC1151CSW#PBF Analog Devices, Inc SOIC-16



LTC2053CMS8



Analog Devices, Inc MSOP8



LT1491ACS Analog Devices, Inc SOP14







LT1498CS8

Analog Devices, Inc SOP-8

#### LTC1150CN8

Analog Devices, Inc DIP8

#### LT6105IMS8

Analog Devices, Inc MSOP-8



#### LTC1150CS8

Analog Devices, Inc

SOP8



Analog Devices, Inc DIP-8