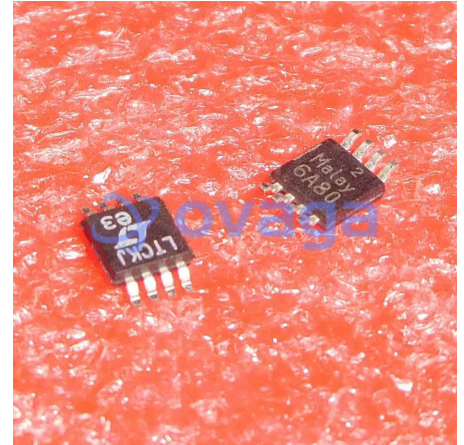


LINEAR TECHNOLOGY LTC6102HMS8#PBF Current Sense Amplifier, Precision Zero Drift, 1 Amplifier, 0.06nA, MSOP, 8Pins, -40°C, 125°C

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	8MSOP
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC6102HMS8#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LTC6102/LTC6102HV are versatile, high voltage, highside current sense amplifiers. Their high supply voltage rating allows their use in many high side applications, while the low drift and offset ensure accuracy across a wide range of operating conditions. The LTC6102-1 is a version of the LTC6102 that includes a low power disable mode to conserve system standby power.

The LTC6102/LTC6102HV monitor current via the voltage across an external sense resistor (shunt resistor). Internal circuitry converts input voltage to output current, allowing a small sense signal on a large common mode voltage to be translated to a ground-referred signal. Low DC offset allows the use of very low shunt resistor values and large gain-setting resistors. As a result, power loss in the shunt is reduced.

The wide operating supply and high accuracy make the LTC6102 ideal for a large array of applications, from automotive, to industrial and power management. A maximum input sense voltage of 2V allows a wide range of currents and voltages to be monitored. Fast response makes the LTC6102 the perfect choice for load current warnings and shutoff protection control.

All versions of the LTC6102 are available in 8-lead MSOP and 3mm × 3mm DFN packages.

## Features

Supply Range:

4V to 60V, 70V Maximum (LTC6102)

5V to 100V, 105V Maximum (LTC6102HV)

Fast Response: 1 $\mu$ s Step Response

Gain Configurable with Two Resistors

Low Input Bias Current: 3nA Maximum

PSRR 130dB Minimum

Output Currents up to 1mA

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

Disable Mode (LTC6102-1 Only): 1 $\mu$ A Maximum

Available in 8-Lead MSOP and 3mm  $\times$  3mm DFN Packages

## Application

Current Shunt Measurement

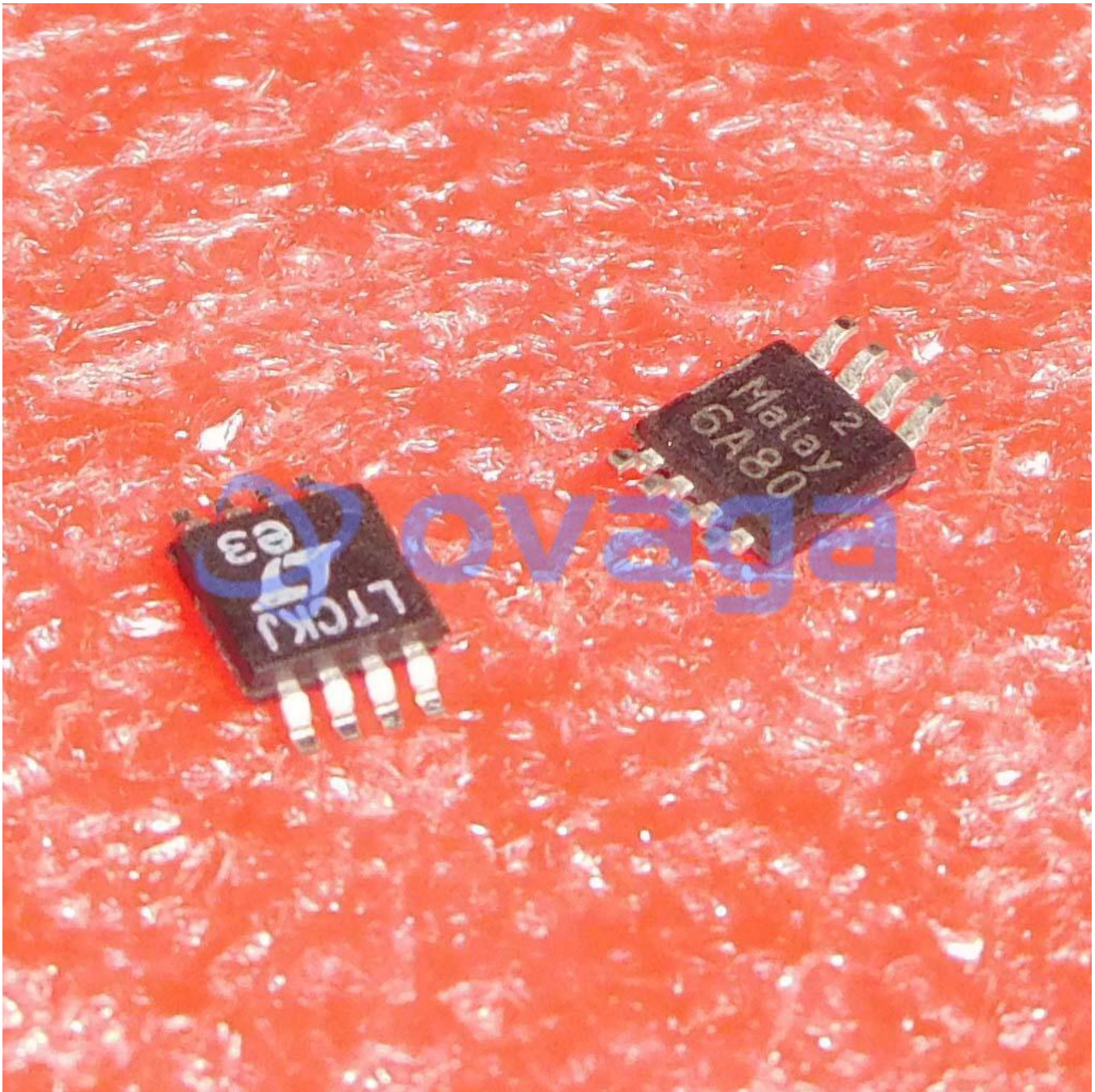
Battery Monitoring

Remote Sensing

Load Protection

Motor Control

Automotive Controls



## Related Products



### [LTC1151CSW#PBF](#)

Analog Devices, Inc  
SOIC-16



### [LT1498CS8](#)

Analog Devices, Inc  
SOP-8



### [LTC2053CMS8](#)

Analog Devices, Inc  
MSOP8



### [LTC1150CN8](#)

Analog Devices, Inc  
DIP8



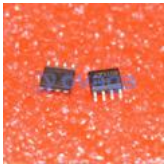
[LT1491ACS](#)

Analog Devices, Inc  
SOP14



[LT6105IMS8](#)

Analog Devices, Inc  
MSOP-8



[LTC1150CS8](#)

Analog Devices, Inc  
SOP8



[LT1013CN8](#)

Analog Devices, Inc  
DIP-8