LTC6102HVHDD#PBF

Data Sheet

SP Amp Current Sense Amp Single 100V Automotive 8Pin DFN EP

Manufacturers	Analog Devices, Inc
Package/Case	DFN8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	

Images are for reference only

Please submit RFQ for LTC6102HVHDD#PBF or Email to us: 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: 1µs 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): 1µA Maximum

Available in 8-Lead MSOP and 3mm × 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

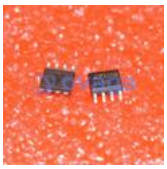
Analog Devices, Inc

SOP14

LT6105IMS8

Analog Devices, Inc

MSOP-8



LTC1150CS8

Analog Devices, Inc

SOP8

LT1013CN8

Analog Devices, Inc

DIP-8