LT1999CMS8-10#PBF

Data Sheet

LT1999 - High Voltage, Bidirectional Current Sense Amplifier

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	

Images are for reference only

Please submit RFQ for LT1999CMS8-10#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The LT1999 is a high speed precision current sense amplifier, designed to monitor bidirectional currents over a wide common mode range. The LT1999 is offered in three gain options: 10V/V, 20V/V, and 50V/V.

The LT1999 senses current via an external resistive shunt and generates an output voltage, indicating both magnitude and direction of the sensed current. The output voltage is referenced halfway between the supply voltage and ground, or an external voltage can be used to set the reference level. With a 2MHz bandwidth and a common mode input range of –5V to 80V, the LT1999 is suitable for monitoring currents in H-Bridge motor controls, switching power supplies, solenoid currents, and battery charge currents from full charge to depletion.

The LT1999 operates from an independent 5V supply and draws 1.55mA. A shutdown mode is provided for minimizing power consumption.

The LT1999 is available in an 8-lead SOP, an 8-lead MSOP (original pinout), or an 8-lead pinout option engineered for FMEA.

Applications

Features

Buffered Output with 3 Gain Options: 10V/V, 20V/V, 50V/V

Gain Accuracy: 0.5% Max

Input Common Mode Voltage Range: –5V to 80V

AC CMRR > 80dB at 100kHz

Input Offset Voltage: 1.5mV Max

Smooth, Continuous Operation Over Entire Common Mode Range

4kV HBM Tolerant and 1kV CDM Tolerant

Low Power Shutdown <10µA

8-Lead MSOP and 8-Lead SO (Narrow) Packages

8-Lead MSOP Pinout Option Engineered for FMEA

AEC-Q100 Qualified for Automotive Applications

Application

High Side or Low Side Current Sensing

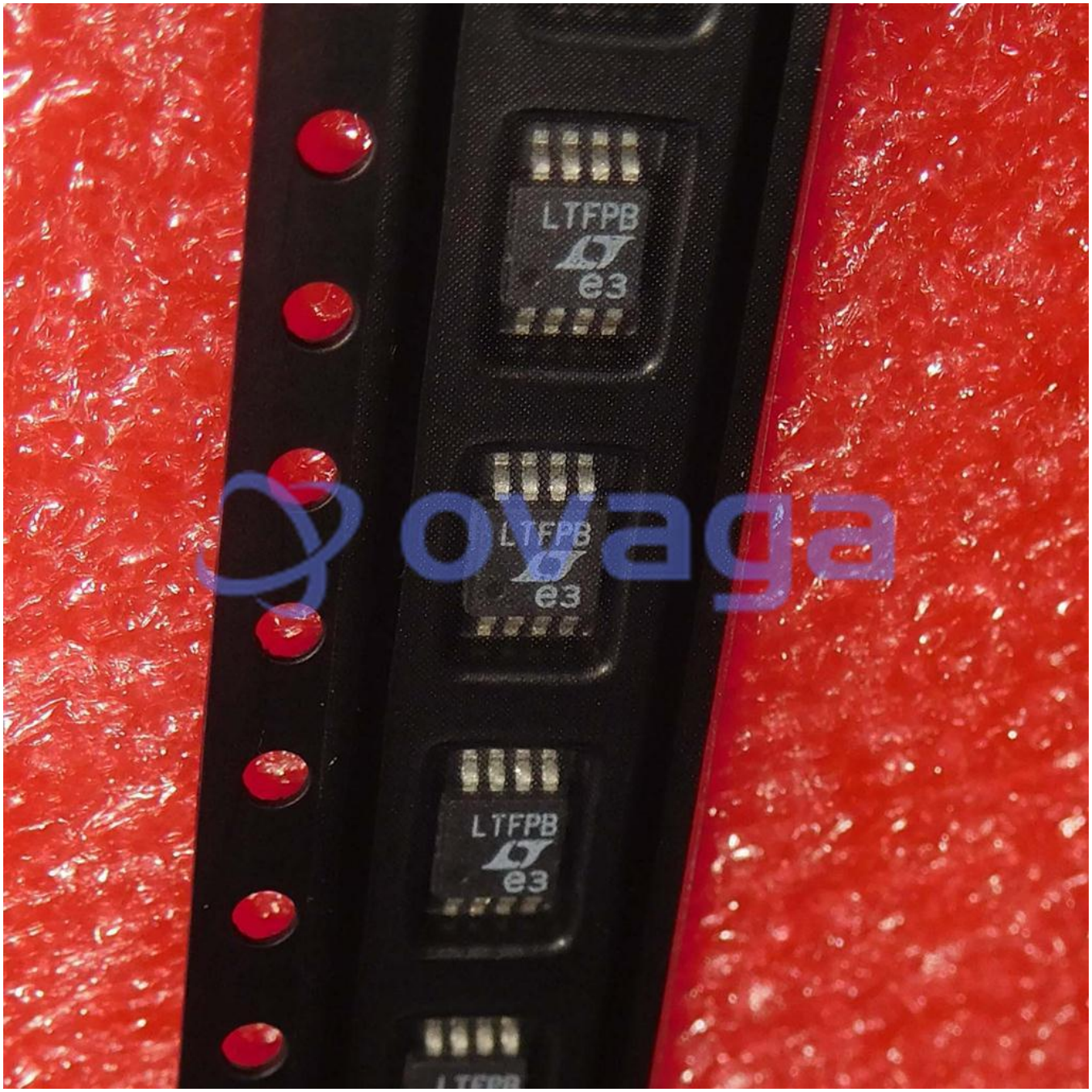
H-Bridge Motor Control

Solenoid Current Sense

High Voltage Data Acquisition

PWM Control Loops

Fuse/MOSFET Monitoring



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]

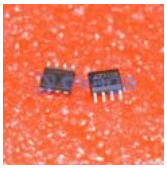
Analog Devices, Inc

SOP14

[LT6105IMS8]

Analog Devices, Inc

MSOP-8



[LTC1150CS8]

Analog Devices, Inc

SOP8

[LT1013CN8]

Analog Devices, Inc

DIP-8