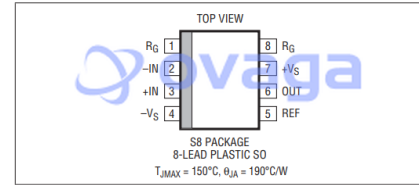


IC INSTRUMENT AMP R-R OUT 8-SOIC

Manufacturers	Analog Devices, Inc
Package/Case	SOP8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	

PIN CONFIGURATION



Images are for reference only

Please submit RFQ for LT1789IS8-1#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LT1789-1/LT1789-10 are micropower, precision instrumentation amplifiers that are optimized for single supply operation from 2.2V to 36V. The quiescent current is 95µA max, the inputs common mode to ground and the output swings within 110mV of ground. The gain is set with a single external resistor for a gain range of 1 to 1000 for the LT1789-1 and 10 to 1000 for the LT1789-10.

The high accuracy of the LT1789-1 (40ppm maximum nonlinearity and 0.25% max gain error) is unmatched by other micropower instrumentation amplifiers. The LT1789-10 maximizes both the input common mode range and dynamic output range when an amplification of 10 or greater is required, allowing precise signal processing where other instrumentation amplifiers fail to operate. The LT1789-1/LT1789-10 are laser trimmed for very low input offset voltage, low input offset voltage drift, high CMRR and high PSRR. The output can handle capacitive loads up to 400pF (LT1789-1), 1000pF (LT1789-10) in any gain configuration while the inputs are ESD protected up to 10kV (human body).

The LT1789-1/LT1789-10 are offered in the 8-pin SO package, requiring significantly less PC board area than discrete multi op amp and resistor designs.

Applications

Features

Micropower: 95 μ A Supply Current Max

Low Input Offset Voltage: 100 μ V Max

Low Input Offset Voltage Drift: 0.5 μ V/ $^{\circ}$ C Max

Single Gain Set Resistor:

Inputs Common Mode to V

Wide Supply Range: 2.2V to 36V Total Supply

CMRR at>

Gain Error:>

Gain Nonlinearity:>

Input Bias Current: 40nA Max

PSRR at>

1kHz Voltage Noise: 48nV/ $\sqrt{\text{Hz}}$

Hz

0.1Hz to 10Hz Noise: 1.5 μ V

P-P

Application

Portable Instrumentation

Bridge Amplifiers

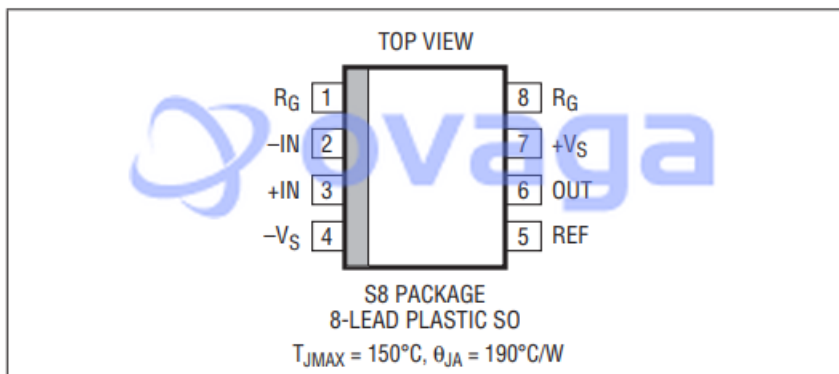
Strain Gauge Amplifiers

Thermocouple Amplifiers

Differential to Single-Ended Converters

Medical Instrumentation

PIN CONFIGURATION



BLOCK DIAGRAM

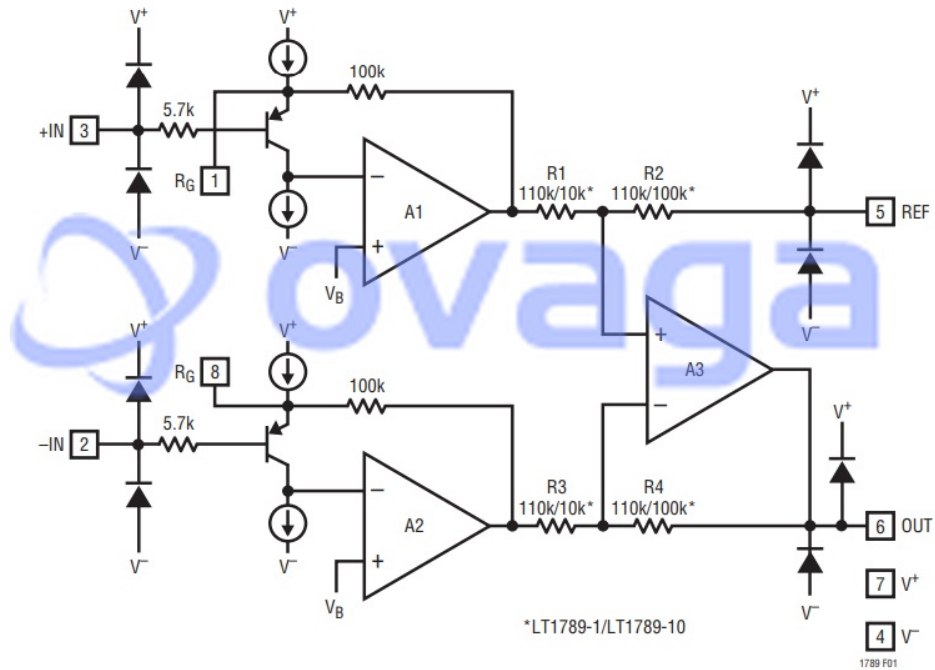


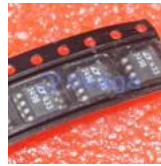
Figure 1. Block Diagram

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



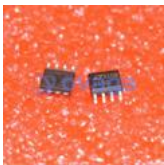
[LT1491ACS](#)

Analog Devices, Inc
SOP14



[LT6105IMS8](#)

Analog Devices, Inc
MSOP-8



[LTC1150CS8](#)

Analog Devices, Inc
SOP8



[LT1013CN8](#)

Analog Devices, Inc
DIP-8