LT1636IDD#PBF

Data Sheet

LINEAR TECHNOLOGY LT1636IDD#PBF Operational Amplifier, Single, 1 Amplifier, 220kHz, 0.075V/µs, 2.7V to 44V, DFN, 8Pins

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

Images are for reference only

Please submit RFQ for LT1636IDD#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The LT1636 op amp operates on all single and split supplies with a total voltage of 2.7V to 44V drawing less than 50µA of quiescent current. The LT1636 can be shut down, making the output high impedance and reducing the quiescent current to 4µA. The LT1636 has a unique input stage that operates and remains high impedance when above the positive supply. The inputs take 44V both differential and common mode, even when operating on a 3V supply. The output swings to both supplies. Unlike most micropower op amps, the LT1636 can drive heavy loads; its rail-to-rail output drives 18mA. The LT1636 is unity-gain stable into all capacitive loads up to 10,000pF when a 0.22µF and 150Ω compensation network is used.

The LT1636 is reverse supply protected: it draws no current for reverse supply up to 27V. Built-in resistors protect the inputs for faults below the negative supply up to 22V. There is no phase reversal of the output for inputs 5V below VEE or 44V above VEE, independent of VCC.

The LT1636 op amp is available in the 8-pin MSOP, PDIP and SO packages. For space limited applications the LT1636 available in a 3mm × 3mm × 0.8mm dual fine pitch leadless package (DFN).

Features

Rail-to-Rail Input and Output

Micropower: 50μA IQ, 44V Supply

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

Over-The-Top®: Input Common Mode Range Extends 44V Above VEE, Independent of VCC

Low Input Offset Voltage: 225μV Max

Specified on 3V, 5V and ±15V Supplies

High Output Current: 18mA

Output Shutdown

Output Drives 10,000pF with Output Compensation

Reverse Battery Protection to 27V

High Voltage Gain: 2000V/mV

High CMRR: 110dB

220kHz Gain-Bandwidth Product

8-Lead DFN, MSOP, PDIP and SO Packages

Application

Battery- or Solar-Powered Systems

Portable Instrumentation

Sensor Conditioning

Supply Current Sensing

Battery Monitoring

MUX Amplifiers

4mA to 20mA Transmitters

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](#)

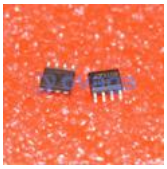
Analog Devices, Inc

SOP14

[LT6105IMS8](#)

Analog Devices, Inc

MSOP-8



LTC1150CS8

Analog Devices, Inc

SOP8

LT1013CN8

Analog Devices, Inc

DIP-8