

LT1028ACN8#PBF

Data Sheet

Ultra Low Noise Precision High Speed Op Amps; Package: PDIP; No of Pins: 8; Temperature Range: 0°C to +70°C

Manufacturers <u>Analog Devices, Inc</u>

Package/Case 8PDIP

Product Type Amplifier ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for LT1028ACN8#PBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

The LT1028 (gain of -1 stable)/LT1128(gain of +1 stable) achieve a new standard of excellence in noise performance with $0.85 \text{nV}/\sqrt{\text{Hz}}$ 1kHz noise, $1.0 \text{nV}/\sqrt{\text{Hz}}$ 10Hz noise. This ultralow noise is combined with excellent high speed specifications (gain-bandwidth product is 75MHz for LT1028, 20MHz for LT1128), distortion-free output, and true precision parameters $(0.1 \mu\text{V}/^{\circ}\text{C})$ drift, $10 \mu\text{V}$ offset voltage, 30 million voltage gain). Although the LT1028/LT1128 input stage operates at nearly 1mA of collector current to achieve low voltage noise, input bias current is only 25nA.

The LT1028/LT1128's voltage noise is less than the noise of a 50Ω resistor. Therefore, even in very low source impedance transducer or audio amplifier applications, the LT1028/LT1128's contribution to total system noise will be negligible.

Features

Voltage Noise

 $1.1 \text{nV}/\sqrt{\text{Hz Max. at 1kHz}}$

0.85nV/ $\sqrt{\text{Hz}}$ Typ. at 1kHz

 $1.0 \text{nV}/\sqrt{\text{Hz}}$ Typ. at 10 Hz

35nVP-P Typ., 0.1Hz to 10Hz

Gain-Bandwidth Product

LT1028: 50MHz Min.

LT1128: 13MHz Min.

Slew Rate

LT1028: 11V/µs Min.

LT1128: 5V/µs Min.

Offset Voltage: 40µV Max.

Drift with Temperature: 0.8 µV/°C Max.

Voltage Gain: 7 Million Min.

Voltage and Current Noise 100% Tested

Available in 8-Pin SO Package

Related Products



LTC1151CSW#PBF

Analog Devices, Inc SOIC-16



LTC2053CMS8

Analog Devices, Inc MSOP8



LT1491ACS

Analog Devices, Inc SOP14

Application

Low Noise Frequency Synthesizers

High Quality Audio

Infrared Detectors

Accelerometer and Gyro Amplifiers

350 ohms Bridge Signal Conditioning

Magnetic Search Coil Amplifiers

Hydrophone Amplifiers



LT1498CS8

Analog Devices, Inc SOP-8



LTC1150CN8

Analog Devices, Inc DIP8



LT6105IMS8

Analog Devices, Inc MSOP-8



LTC1150CS8

Analog Devices, Inc
SOP8



LT1013CN8

Analog Devices, Inc

DIP-8