

LT1022AMH/883

Data Sheet

High Speed, Precision JFET Input Operational Amplifier

Manufacturers Analog Devices, Inc

Package/Case CAN8

Product Type Operational Amplifiers (Op Amps); Precision Op Amps (Vos

 $\leq 1 \text{mV & TCVos} \leq 2 \text{uV/C}$

RoHS

Lifecycle



Images are for reference only

Please submit RFQ for LT1022AMH/883 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LT1022 JFET input operational amplifier combines high speed and precision performance.

A $26V/\mu s$ slew rate and 8.5MHz gain-bandwidth product are simultaneously achieved with offset voltage of typically $80\mu V$, $1.5\mu V/^{\circ}C$ drift, bias currents of 50pA at $70^{\circ}C$, 500pA at $125^{\circ}C$. The output delivers 20mA of load current without gain degradation.

The 250 µV maximum offset voltage specification represents less than 1/2 least significant bit error in a 14-bit, 10V system.

The LT1022A meets or exceeds all OP-16A and OP-16E specifications. It is faster and more accurate without stability problems at cold temperatures.

The LT1022 can be used as the output amplifier for 12-bit current output D/A converters, as shown below.

For a more accurate, lower power dissipation, but slower JFET input op amp, please refer to the LT1055 data sheet.

Features

Guaranteed Slew Rate: 23V/µs Min.

Guaranteed Offset Voltage: $250\mu V$ Max

Guaranteed Drift: 5µV/°C Max.

Guaranteed Bias Current:

70°C 180pA Max.

125°C 4nA Max.

Gain-Bandwidth Product: 8.5MHz Typ

Settling Time to 0.05% (10V Step): $0.9\mu s$ Typ

Application

Fast D/A Output Amplifiers (12, 14, 16 Bits)

High Speed Instrumentation

Fast, Precision Sample and Hold

Voltage-to-Frequency Converters

Logarithmic Amplifiers





Related Products



LT1616ES6

Analog Devices, Inc SOT-23-6



LT3469ETS8

Analog Devices, Inc SOT23-8



LT3470ITS8

Analog Devices, Inc TSOT23-8



LT1086MH

Analog Devices, Inc CAN3



LT1086CT-5

Analog Devices, Inc TO-220



LT1210CT7

Analog Devices, Inc TO-220-7



LT1170HVCT

Analog Devices, Inc TO-220



LT1964ES5-BYP#PBF

Analog Devices, Inc SOT-23-5