

AD820ARMZ

Data Sheet

Operational Amplifier, Single, 1 Amplifier, 1.9 MHz, 3 V/µs, 5V to 36V, MSOP, 8 Pins

Manufacturers Analog Devices, Inc

Package/Case MSOP-8

Product Type Amplifier ICs

RoHS Pb-free Halide free



Images are for reference only

Please submit RFQ for AD820ARMZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Lifecycle

Offset voltage of $800~\mu V$ maximum, offset voltage drift of $2~\mu V/^{\circ}C$, typical input bias currents below 25~pA, and low input voltage noise provide dc precision with source impedances up to $1~G\Omega$. 1.8~MHz unity gain bandwidth, -93~dB THD at 10~kHz, and $3~V/\mu s$ slew rate are provided for a low supply current of $800~\mu A$. The AD820 drives up to 350~pF of direct capacitive load and provides a minimum output current of 15~mA. This allows the amplifier to handle a wide range of load conditions. This combination of ac and dc performance, plus the outstanding load drive capability, results in an exceptionally versatile amplifier for the single-supply user.

The AD820 is available in two performance grades. The A and B grades are rated over the industrial temperature range of -40° C to $+85^{\circ}$ C. The AD820 is offered in three 8-lead package options: plastic DIP (PDIP), surface mount (SOIC) and (MSOP).

Features

True single-supply operationOutput swings rail-to-railInput voltage range extends below groundSingle-supply capability from 5 V to 36 VDual-supply capability from ± 2.5 V to ± 18 V

Excellent load driveCapacitive load drive up to 350 pFMinimum output current of 15 mA

Excellent ac performance for low power800 µA maximum quiescent currentUnity-gain bandwidth: 1.8 MHzSlew rate Active filters of 3 V/us

Excellent dc performance800 µV maximum input offset voltage2 µV/°C typical offset voltage driff25 pA maximum input bias current

Low noise: $13 \text{ nV/}\sqrt{\text{Hz}}$ @ 10 kHz

Application

Battery-powered precision instrumentation

Photodiode preamps

12-bit to 14-bit data acquisition systems

Medical instrumentation

Low power references and regulators

Data Sheet, Rev. F, 11/08

Related Products



AD8418BRMZ-RL

Analog Devices, Inc MSOP-8



ADA4084-2ARMZ

Analog Devices, Inc MSOP-8



AD8567ARUZ

Analog Devices, Inc TSSOP-14



AD8022ARMZ

Analog Devices, Inc

MSOP-8



ADA4528-2ARMZ-R7

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



AD8628AUJZ

Analog Devices, Inc SOP23



AD8041AR

Analog Devices, Inc SOP-8