

## AD8031ARTZ-REEL7

Data Sheet

Operational Amplifier, Single, 1 Amplifier, 80 MHz, 35 V/µs, 2.7V to 12V, SOT-23, 5 Pins

Manufacturers Analog Devices, Inc

Package/Case SOT-23-5

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for AD8031ARTZ-REEL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

## **General Description**

The AD8031 (single) is a single supply voltage feedback amplifier that features high speed performance with 80 MHz of small signal bandwidth, 30  $V/\mu s$  slew rate and 125 ns settling time. This performance is possible while consuming less than 4.0 mW of power from a single +5 V supply. This feature increases the operation time of high speed, battery-powered systems without compromising dynamic performance.

The AD8031 has true single supply capability with rail-to-rail input and output characteristics and is specified for  $\pm 2.7 \text{ V}$ ,  $\pm 5 \text{ V}$ , and  $\pm 5 \text{ V}$  supplies. The input voltage range can extend to 500 mV beyond each rail. The output voltage swings to within 20 mV of each rail providing the maximum output dynamic range.

The AD8031 also offers excellent signal quality for only  $800 \,\mu\text{A}$  of supply current per amplifier; THD is -62 dBc with a 2 V p-p, 1 MHz output signal, and -86 dBc for a  $100 \,\text{kHz}$ ,  $4.6 \,\text{V}$  p-p signal on +5 V supply. The low distortion and fast settling time make it ideal as a buffer to single supply ADCs.

Operating on supplies from  $\pm 2.7~V$  to  $\pm 12~V$  and dual supplies up to  $\pm 6~V$ , the AD8031 is ideal for a wide range of applications, from battery operated systems with large bandwidth requirements to high speed systems where component density requires lower power dissipation. The AD8031 is available in 8-lead PDIP, 8-lead SOIC\_N and 5-lead SOT-23 packages and operates over the industrial temperature range of  $\pm 40^{\circ}$ C to  $\pm 85^{\circ}$ C.

AD8032 - Dual Amplifier

## **Features**

Low powerSupply current 800  $\mu$ A/amplifierFully specified at  $\pm 2.7$  V,  $\pm 5$  V and  $\pm 5$  V supplies

High speed and fast settling on 5 V80 MHz, -3 dB bandwidth>

Output current: 15 mA

High grade optionVOS>

Rail-to-rail input and outputNo phase reversal with input0.5 V beyond suppliesInput CMVR extends beyond rails by 200 mVOutput swing to within 20 mV of either rail

Low distortion-62 dB @ 1 MHz, = 4.6 V p-p



## **Related Products**



AD8418BRMZ-RL
Analog Devices, Inc
MSOP-8



ADA4528-2ARMZ-R7
Analog Devices, Inc
MSOP-8



**ADA4084-2ARMZ** 

Analog Devices, Inc MSOP-8



AD8567ARUZ

Analog Devices, Inc TSSOP-14



AD8022ARMZ

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



AD8628AUJZ

Analog Devices, Inc SOP23



**AD8041AR** 

Analog Devices, Inc SOP-8