

# **AD824ARZ-14**

Data Sheet

Operational Amplifier, Quad, 4 Amplifier, 2 MHz, 2 V/ $\!\mu\!s$ , 3V to 30V, SOIC, 14 Pins

Manufacturers	Analog Devices, Inc	The second s
Package/Case	SOP14	
Product Type	Amplifier ICs	
RoHS	Rohs	B
Lifecycle		Images are for reference only

Please submit RFQ for AD824ARZ-14 or Email to us: sales@ovaga.com We will contact you in 12 hours.

<u>RFQ</u>

## **General Description**

The AD824 is a quad, FET input, single supply amplifier, featuring rail-to-rail outputs. The combination of FET inputs and rail-to-rail outputs makes the AD824 useful in a wide variety of low voltage applications where low input current is a primary consideration.

The AD824 is guaranteed to operate from a 3 V single supply up to  $\pm 15$  volt dual supplies. AD824AR-3V parametric performance at 3 V is fully guaranteed.

Fabricated on ADI's complementary bipolar process, the AD824 has a unique input stage that allows the input voltage to safely extend beyond the negative supply and to the positive supply without any phase inversion or latch-up. The output voltage swings to within 15 mV of the supplies. Capacitive loads to 350 pF can be handled without oscillation.

The FET input combined with laser trimming provides an input that has extremely low bias currents with guaranteed offsets below 1 mV. This enables high accuracy designs even with high source impedances. Precision is combined with low noise, making the AD824 ideal for use in battery powered medical equipment.

Applications for the AD824 include portable medical equipment, photo diode preamplifiers, and high impedance transducer amplifiers.

The ability of the output to swing rail-to-rail enables designers to build multistage filters in single supply systems and maintain high signal-to-noise ratios.

The AD824 is specified over the extended industrial (-40°C to +85°C) temperature range and is available in narrow 14-lead SOIC package. Applications Photo diode preamplifier

Battery powered instrumentation

Power supply control and protection

Medical instrumentation

Remote sensors

**Ovaga Technologies Limited** 

Low voltage strain gage amplifiers

DAC output amplifier

### Features

Single supply operation: 3 V to 30 V

Very low input bias current: 2 pA

Wide input voltage range

Rail-to-rail output swing

Low supply current per amplifier: 500 µA

Wide bandwidth: 2 MHz

Slew rate: 2 V/µs

No phase reversal

#### **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



Application

Photo diode preamplifier

Medical instrumentation

DAC output amplifier

Remote sensors

Battery powered instrumentation

Power supply control and protection

Low voltage strain gage amplifiers

#### ADA4528-2ARMZ-R7

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



Analog Devices, Inc

AD8628AUJZ

SOP23

AD8041AR Analog Devices, Inc SOP-8

