

ADA4638-1ARZ

Data Sheet

Operational Amplifier, Single, 1 Amplifier, 2.5 MHz, 1.5 V/µs, 4.5V to 30V, SOIC, 8 Pins

Manufacturers Analog Devices, Inc

Package/Case SOP-8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for ADA4638-1ARZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The ADA4638-1 is a high voltage, high precision, zero-drift amplifier featuring rail-to-rail output swing. It is guaranteed to operate from 4.5 V to 30 V single supply or $\pm 2.25 \text{ V}$ to $\pm 15 \text{ V}$ dual supplies while consuming less than 0.95 mA of supply current at $\pm 5 \text{ V}$.

With an offset voltage of 4 μ V, offset drift less than 0.05 μ V/°C, no 1/f noise, and input voltage noise of only 1.2 μ V p-p (0.1 Hz to 10 Hz), the ADA4638-1 is suited for high precision applications where large error sources cannot be tolerated. Pressure sensors, medical equipment, and strain gage amplifiers benefit greatly from nearly zero drift over the wide operating temperature range. Many applications can take advantage of the rail-to-rail output swing provided by the ADA4638-1 to maximize the signal-to-noise ratio (SNR).

The ADA4638-1 is specified for the extended industrial (-40° C to $+125^{\circ}$ C) temperature range and is available in 8-lead LFCSP (3 mm × 3 mm) and SOIC packages.

Features

Single Supply Operation: 4.5 V to 30V

Dual supply operation: $\pm 2.25~V$ to $\pm 15~V$

Low offset voltage: 4 µV maximum

Input offset voltage drift: $0.05~\mu\text{V/}^{\circ}\text{C}$ maximum

High gain: 130 dB minimum

High PSRR: 120 dB minimum

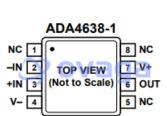
High CMRR: 130 dB minimum

Input common-mode range includes lower supply rail

Rail-to-rail output

Low supply current: 0.95 mA maximum





Application

Electronic weigh scale

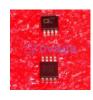
Strain gage amplifiers

Medical instrumentation

Thermocouple amplifiers

Pressure and position sensors

Related Products



AD8418BRMZ-RL
Analog Devices, Inc
MSOP-8



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



ADA4084-2ARMZ
Analog Devices, Inc
MSOP-8



Analog Devices, Inc MSOP8

AD8062ARMZ



AD8567ARUZ

Analog Devices, Inc
TSSOP-14





Analog Devices, Inc SOP23

AD8628AUJZ



AD8041AR
Analog Devices, Inc
SOP-8