

Precision Amplifiers 55V Low Noise Zero Drift OpAmp 1x

Manufacturers	Analog Devices, Inc
Package/Case	SOP8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADA4522-1ARZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADA4522-1 / ADA4522-2 / ADA4522-4 are single/dual/quadchannel, zero drift op amps with low noise and power, groundsensing inputs, and rail-to-rail output, optimized for totalaccuracy over time, temperature, and voltage conditions. Thewide operating voltage and temperature ranges, as well as thehigh open-loop gain and very low dc and ac errors make thedevices well suited for amplifying very small input signals andfor accurately reproducing larger signals in a wide variety ofapplications.

The ADA4522-1 / ADA4522-2 / ADA4522-4 performance isspecified at 5.0 V, 30 V, and 55 V power supply voltages. Thesedevices operate over the range of 4.5 V to 55 V, and are excellentfor applications using single-ended supplies of 5 V, 10 V, 12 V,and 30 V, or for applications using higher single supplies anddual supplies of ± 2.5 V, ± 5 V, and ± 15 V. The ADA4522-1 / ADA4522-2 / ADA4522-4 use on-chip filtering to achieve highimmunity to electromagnetic interference (EMI).

The ADA4522-1 / ADA4522-2 / ADA4522-4 are fully specifiedover the extended industrial temperature range of -40°C to $+125^{\circ}\text{C}$ and are available in 8-lead MSOP, 8-lead SOIC, 14-leadSOIC, and 14-lead TSSOP packages.

Features

Low offset voltage: 5 μ V maximum

Extremely low offset voltage drift: 22 nV/ $^{\circ}$ C maximum

Low voltage noise density:

5.8 nV/ $\sqrt{\text{Hz}}$ typical

117 nV p-p typical from 0.1 Hz to 10 Hz

Low input bias current: 50 pA typical

Unity-gain crossover: 3 MHz typical

Single-supply operation: input voltage range includes ground and rail-to-rail output

Wide range of operating voltages

Single-supply operation: 4.5 V to 55 V

Dual-supply operation: \pm 2.25 V to \pm 27.5 V

Integrated EMI filters

Unity-gain stable

Application

Inductance, capacitance, and resistance (LCR) meter/megohmmeter front-end amplifiers

Load cell and bridge transducers

Magnetic force balance scales

High precision shunt current sensing

Thermocouple/resistance temperature detector (RTD) sensors

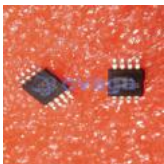
Programmable logic controller (PLC) input and output amplifiers

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](#)

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[AD8062ARMZ](#)

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[AD8628AUJZ](#)

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