

# ADA4522-2ARMZ-R7

Data Sheet

Precision Amplifiers 55V Low Noise Zero Drift OpAmp 2x PIN CONNECTION DIAGRAM -IN A 2 7 OUT B Manufacturers Analog Devices, Inc +IN A 3 6 -IN B Figure 1. 8-Lead MSOP (RM Suffix) and 8-Lead SOIC (R Suffix) Package/Case MSOP-8 Pin Configuration Images are for reference only Product Type Amplifier ICs **RoHS** Pb-free Halide free Lifecycle

Please submit RFQ for ADA4522-2ARMZ-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

**RFO** 

# **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 and for accurately reproducing larger signals in a wide variety of applications.

The ADA4522-1 / ADA4522-2 / ADA4522-4 performance isspecified at 5.0 V, 30 V, and 55 V power supply voltages. These devices operate over the range of 4.5 V to 55 V, and are excellent for applications using single-ended supplies of 5 V, 10 V, 12 V, and 30 V, or for applications using higher single supplies and dual supplies of  $\pm 2.5$  V,  $\pm 5$  V, and  $\pm 15$  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 specified over the extended industrial temperature range of -40°C to+125°C and are available in 8-lead MSOP, 8-lead SOIC, 14-leadSOIC, and 14-lead TSSOP packages.

### **Features**

Low offset voltage: 5 µV maximum

Extremely low offset voltage drift: 22 nV/°C maximum

Low voltage noise density:

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

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:  $\pm 2.25 \text{ V}$  to  $\pm 27.5 \text{ V}$ 

Integrated EMI filters

Unity-gain stable

Available As Known Good Die and fully guaranteed to data sheet specifications

# **Application**

Inductance, capacitance, and resistance (LCR) meter/megohmmeter frontend 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

# PIN CONNECTION DIAGRAM

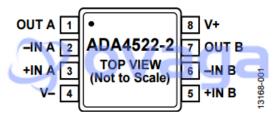
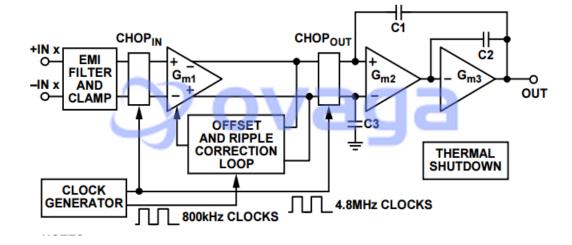


Figure 1. 8-Lead MSOP (RM Suffix) and 8-Lead SOIC (R Suffix)
Pin Configuration

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#### **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