

# **RH1499MW**

Data Sheet

10MHz, 6V/µs, Quad Rail-to-Rail Input and Output Precision C-Load Op Amp

Manufacturers <u>Analog Devices, Inc.</u>

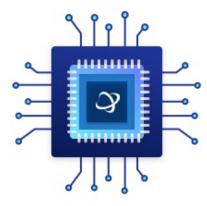
Package/Case CPAK-14P

Product Type Operational Amplifiers (Op Amps); Rail-to-Rail Op Amps

RoHS

Lifecycle

Please submit RFQ for RH1499MW or Email to us; sales@ovaga.com We will contact you in 12 hours.



Images are for reference only

RFO

# **General Description**

The RH1499 is a quad, rail-to-rail input and output precision C-Load<sup>TM</sup> op amp with a 10MHz gain-bandwidth product and a 6V/µs slew rate.

The RH1499 is designed to maximize input dynamic range by delivering precision performance over the full supply voltage. Using a patented technique, the input stages of the RH1499 are trimmed, one at the negative supply and the other at the positive supply. The resulting guaranteed common mode rejection is much better than other rail-to-rail input op amps. When used as a unity-gain buffer in front of single supply 12-bit A-to-D converters, the RH1499 is guaranteed to add less than 1LSB of error even in single 5V supply systems.

With 110dB of supply rejection, the RH1499 maintains its performance over a supply range of 4.5V to 36V. The inputs can be driven beyond the supplies without damage or phase reversal of the output. These op amps remain stable while driving capacitive loads up to 10,000pF.

The wafer lots are processed to our in-house Class S flow to yield circuits usable in stringent military and space applications.

**Features** 

MIL-PRF-38535 Class V Compliant Version -

Rail-to-Rail Input and Output

 $800\mu V$  Max VOS from V+ to V-

Gain-Bandwidth Product: 10MHz

Slew Rate: 4.5V/µs

Low Supply Current per Amplifier: 1.7mA

Input Offset Current: 65nA Max

Input Bias Current: 650nA Max

Low Input Noise Voltage Density: 12nV/√Hz Typ

Wide Supply Range: 5V to  $\pm 15$ V

Large Output Drive Current: 24mA with 5V supply

Stable for Capacitive Loads Up to 10,000pF

Radiation Performance

Total Ionizing Dose (TID) Tolerance, per TM1019.8, MIL-STD-883:

Displacement Damage Defect (DDD) up to 1E12 Neutrons/cm2 (please refer to RH1498 DDD Report)

Characterized for Single Event Effects up to 117.5 MeV.cm2/mg (please refer to RH1498 SEE Report)

#### **Related Products**



#### **RH1498MW**

Analog Devices, Inc

CPAK-10P



### **RH129AH**

Analog Devices, Inc

CAN-2P



#### **RH118W**

Analog Devices, Inc

CPAK-10P



**Application** 

Driving A-to-D Converters

Active Filters

Rail-to-Rail Buffer Amplifiers

Low Voltage Signal Processing



# **RH108AH**

Analog Devices, Inc

CAN-8P



## RH117H

Analog Devices, Inc

CAN-3P



#### **RH118H**

Analog Devices, Inc

CAN-8P

# RH1013MH Analog Devices, Inc CAN



# **RH1814MW**

Analog Devices, Inc CPAK-14P