



Data Sheet

Precision Amplifiers PREC QUAD PICOAMP OP AMP

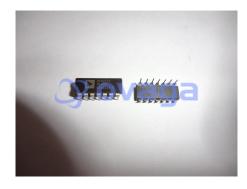
Manufacturers Analog Devices, Inc

Package/Case DIP-14

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for OP497FPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

Precision performance of the OP497 includes very low offset ($<50 \,\mu\text{V}$) and low drift ($<0.5 \,\mu\text{V}/^\circ\text{C}$). Open-loop gain exceeds 2000 V/mV ensuring high linearity in every application. Errors due to common-mode signals are eliminated by its common-mode rejection of $>120 \,d\text{B}$. The OP497 has a power supply rejection of $>120 \,d\text{B}$ which minimizes offset voltage changes experienced in battery-powered systems. The supply current of the OP497 is $<625 \,\mu\text{A}$ per amplifier, and it can operate with supply voltages as low as $\pm 2 \,\text{V}$

The OP497 uses a superbeta input stage with bias current cancellation to maintain picoamp bias currents at all temperatures. This is in contrast to FET input op amps whose bias currents start in the picoamp range at 25°C but double for every 10°C rise in temperature to reach the nanoamp range above 85°C. The input bias current of the OP497 is <100 pA at 25°C.

Combining precision, low power, and low bias current, the OP497 is ideal for a number of applications, including instrumentation amplifiers, log amplifiers, photodiode preamplifiers, and long-term integrators. For a single device, see the OP97 data sheet, and for a dual device, see the OP297 data sheet.

Features

Low offset voltage: 75 µV maximum

Low offset voltage drift: 1.0 $\mu V\!/^{\!\circ} C$ maximum

Very low bias current

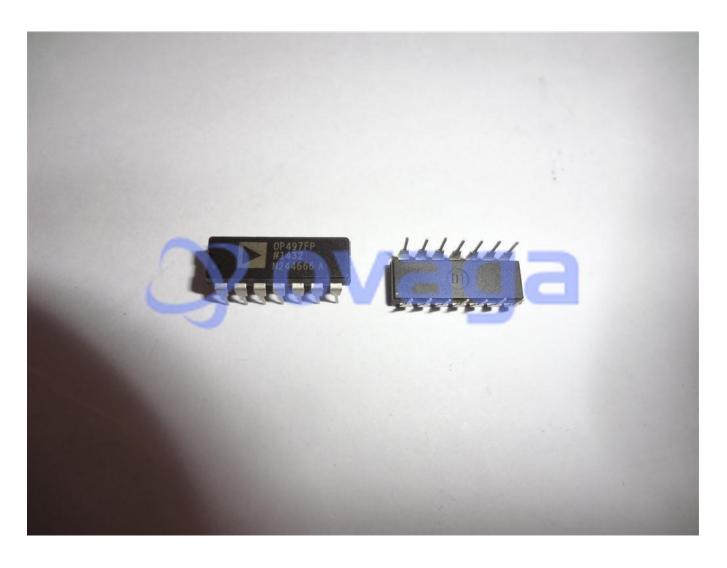
25°C: 150 pA maximum

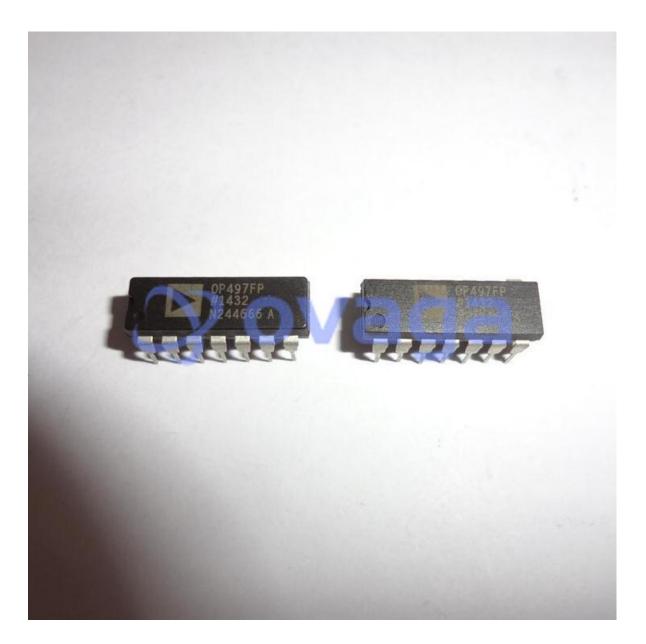
Very high open-loop gain: 2000 V/mV minimum

Low supply current (per amplifier): $625~\mu A$ maximum

Operates from $\pm 2~V$ to $\pm 20~V$ supplies

High common-mode rejection: 114 dB minimum





Related Products



OP213F

Analog Devices, Inc SMD/DIP-8/SOP-8



OP27GP

Analog Devices, Inc PDIP-8



OP462GSZ

Analog Devices, Inc SOIC-14



OP42AZ

Analog Devices, Inc CDIP-8



OP37GS

Analog Devices, Inc SOIC-8



OP2177ARM

Analog Devices, Inc MSOP8



OP467GPZ
Analog Devices, Inc
PDIP-14



OP400GPZ

Analog Devices, Inc
PDIP-14