



Data Sheet

Operational Amplifier, Dual, 2 Amplifier, 500 kHz, $0.15 \text{ V/}\mu\text{s}$, $\pm 2\text{V}$ to $\pm 20\text{V}$, DIP, 8 Pins

Manufacturers Analog Devices, Inc.

Package/Case PDIP-8

Product Type Amplifier ICs

RoHS Pb-free Halide free

Please submit RFQ for OP297GPZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

Images are for reference only

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General Description

Lifecycle

The OP297 is the first dual op amp to pack precision performance into the space-saving, industry standard 8-pin SO package. Its combination of precision with low power and extremely low input bias current makes the dual OP297 useful in a wide variety of applications.

Precision performance of the OP297 includes very low offset, under $50\mu V$, and low drift, below $0.6\mu V/^{\circ}C$. Open-loop gain exceeds 2000V/mV insuring high linearity in every application. Errors due to common-mode signals are eliminated by the OP297's common-mode rejection of over 120 dB. The OP297's power supply rejection of over 120dB minimizes offset voltage changes experienced in battery powered systems. Supply current of the OP297 is under $625\mu A$ per amplifier and it can operate with supply voltages as low a $\pm 2V$.

The OP297 utilizes a super-beta 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 of 25°C, but double for every 10°C rise in temperature, to reach the nanoamp range above 85°C. Input bias current of the OP297 is under 100pA at 25°C and is under 450pA over the military temperature range.

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

Features

Low Offset Voltage: 50 µV Max

Low Offset Voltage Drift: 0.6 µV/°C Max

Very Low Bias Current: 100 pA Max

Very High Open-Loop Gain: 2000 V/mV Min

Low Supply Current (Per Amplifier):625 µA Max

Operates From ± 2 V to ± 20 V Supplies

High Common-Mode Rejection:120 dB Min

Pin Compatible to LT1013, AD706, AD708, OP221, LM158, and MC1458/1558 with Improved Performance

Related Products



OP213F

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



OP27GP

Analog Devices, Inc PDIP-8



OP462GSZ

Analog Devices, Inc SOIC-14



OP467GPZ

Analog Devices, Inc PDIP-14



OP42AZ

Analog Devices, Inc CDIP-8



OP37GS

Analog Devices, Inc SOIC-8



OP2177ARM

Analog Devices, Inc MSOP8



OP400GPZ

Analog Devices, Inc PDIP-14