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## OP297FSZ

Data Sheet

RFO

Operational Amplifier, Dual, 2 Amplifier, 500 kHz, 0.15 V/µs,  $\pm$  2V to  $\pm$  20V, NSOIC, 8 Pins

Manufacturers	Analog Devices, Inc	•
Package/Case	SOIC8	<b>Other a ga</b>
Product Type	Amplifier ICs	
RoHS	Pb-free Halide free	
Lifecycle		Images are for reference only

Please submit RFQ for OP297FSZ or Email to us: sales@ovaga.com We will contact you in 12 hours.

#### **General Description**

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/°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  $\pm 2$ V.

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  $\mu$ V/°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  $\pm 2$  V to  $\pm 20$  V Supplies
- High Common-Mode Rejection:120 dB Min

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



#### **Related Products**



#### <u>OP213F</u>

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



#### <u>OP27GP</u>

Analog Devices, Inc PDIP-8



## <u>OP462GSZ</u>

Analog Devices, Inc SOIC-14



## OP467GPZ Analog Devices, Inc

PDIP-14









## OP2177ARM Analog Devices, Inc MSOP8



## OP400GPZ

Analog Devices, Inc PDIP-14

#### <u>OP42AZ</u>

Analog Devices, Inc CDIP-8

#### <u>OP37GS</u>

Ovaga Technologies Limited