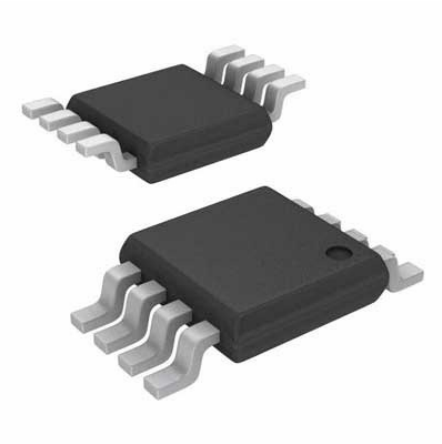
OP2177ARMZ-R7

Data Sheet

Precision Amplifiers Dual PRECISION LOW NOISE OP AMP

Manufacturers	Analog Devices, Inc
Package/Case	MSOP-8
Product Type	Amplifier ICs
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for OP2177ARMZ-R7 or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The OPx177 family consists of very high precision, single, dual, and quad amplifiers featuring extremely low offset voltage and drift, low input bias current, low noise, and low power consump-tion. Outputs are stable with capacitive loads of over 1000 pF with no external compensation. Supply current is less than 500 µA per amplifier at 30 V. Internal 500 Ω series resistors protect the inputs, allowing input signal levels several volts beyond either supply without phase reversal.

Unlike previous high voltage amplifiers with very low offset voltages, the OP1177 (single) and OP2177 (dual) amplifiers are available in tiny 8-lead surface-mount MSOP and 8-lead narrow SOIC packages. The OP4177 (quad) is available in TSSOP and 14-lead narrow SOIC packages. Moreover, specified performance in the MSOP and the TSSOP is identical to performance in the SOIC package. MSOP and TSSOP are available in tape and reel only.

The OPx177 family offers the widest specified temperature range of any high precision amplifier in surface-mount packaging. All versions are fully specified for operation from −40°C to +125°C for the most demanding operating environments.

Applications for these amplifiers include precision diode power measurement, voltage and current level setting, and level detection in optical and wireless transmission systems. Additional applications include line-powered and portable instrumentation and controls—thermocouple, RTD, strain-bridge, and other sensor signal conditioning—and precision filters.

Features

Low offset voltage: 60 µV maximum

Very low offset voltage drift: 0.7 µV/°C maximum

Low input bias current: 2 nA maximum

Low noise: 8 nV/√Hz typical

CMRR, PSRR, and AVO > 120 dB minimum

Low supply current: 400 µA per amplifier

Dual supply operation: ±2.5 V to ±15 V

Unity-gain stable

No phase reversal

Inputs internally protected beyond supply voltage

Application

Wireless base station control circuits

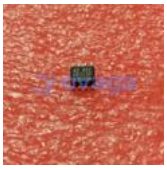
Optical network control circuits

Instrumentation

Sensors and controls

Precision filters

Related Products



OP213F

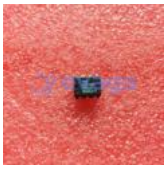
Analog Devices, Inc

SMD/DIP-8/SOP-8

OP42AZ

Analog Devices, Inc

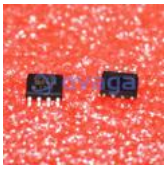
CDIP-8



OP27GP

Analog Devices, Inc

PDIP-8



OP37GS

Analog Devices, Inc

SOIC-8

OP462GSZ

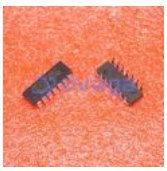
Analog Devices, Inc

SOIC-14

OP2177ARM

Analog Devices, Inc

MSOP8



OP467GPZ

Analog Devices, Inc

PDIP-14

OP400GPZ

Analog Devices, Inc

PDIP-14