

Operational Amplifiers - Op Amps Single Low Noise Fast Settling, JFET

Manufacturers	Analog Devices, Inc
Package/Case	SOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for ADA4625-1ARDZ or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The ADA4625-1/ADA4625-2 build on Analog Devices, Inc., high voltage, single-supply, rail-to-rail output (RRO), precision junction field effect transistor (JFET) input op amps, taking that product type to a level of speed and low noise that has not been made available to the market previously.

The ADA4625-1/ADA4625-2 provide optimal performance in high voltage, high gain, and low noise applications. The input common-mode voltage range includes the negative supply, and the output swings rail to rail. This enables the user to maximize dynamic input range in low voltage, single supply applications without the need for a separate negative voltage power supply for ground sense.

The combination of wide bandwidth, low noise, and low input bias current makes the ADA4625-1/ADA4625-2 especially suitable for phase-locked loop (PLL), active filter amplifiers and for high tuning voltage (VTUNE), voltage controlled oscillators (VCOs) and preamplifiers where low level signals require an amplifier that provides both high amplification and wide bandwidth.

The ADA4625-1/ADA4625-2 are unity-gain stable, and there is no phase reversal when input range exceeds either supply rail by 200 mV. The output is capable of driving loads up to 1000 pF and/or 600 Ω loads.

The ADA4625-1/ADA4625-2 are specified for operation over the extended industrial temperature range of -40°C to $+125^{\circ}\text{C}$ and operates from +5 V to +36 V (± 2.5 V to ± 18 V) with specifications at +5 V and ± 18 V. The devices are available in an 8-lead SOIC package with an exposed pad (EPAD).

Features

Wide gain bandwidth product: 18 MHz typical

High slew rate: 48 V/ μ s typical

Low voltage noise density: 3.3 nV/ $\sqrt{\text{Hz}}$ typical at 1 kHz

Low peak-to-peak noise: 0.15 μ V p-p, 0.1 Hz to 10 Hz

Low input bias current: ± 15 pA typical at $>$

Low offset voltage: ± 80 μ V maximum at $>$

Offset voltage drift: ± 1.2 μ V/ $^{\circ}\text{C}$ maximum at $>$

Fast settling: 0.01% in 700 ns typical

Wide range of operating voltages

Dual-supply operation: ± 2.5 V to ± 18 V

Single-supply operation: 5 V to 36 V

Input voltage range includes V_{-}

Rail-to-rail output

High capacitive load drive capability

Output short-circuit current: ± 46 mA

No phase reversal

Unity-gain stable

Application

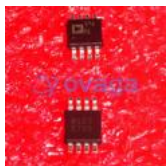
PLL filter amplifiers

Transimpedance amplifiers

Photodiode sensor interfaces

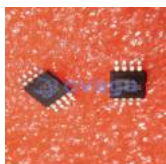
Low noise charge amplifiers

Related Products



[AD8418BRMZ-RL](#)

Analog Devices, Inc
MSOP-8



[ADA4084-2ARMZ](#)

Analog Devices, Inc
MSOP-8



[ADA4528-2ARMZ-R7](#)

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