

AD8065ARZ-REEL7

Data Sheet

High Performance, 145 MHz FastFETTM Op Amp; Package: SOIC; No of Pins: 8; Temperature Range: Industrial

Manufacturers <u>Analog Devices, Inc</u>

Package/Case SOIC-8

Product Type Amplifier ICs

RoHS Rohs

Lifecycle



Images are for reference only

Please submit RFQ for AD8065ARZ-REEL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The AD8065/AD80661 FastFETTM amplifiers are voltage feedback amplifiers with FET inputs offering high performance and ease of use. The AD8065 is a single amplifier, and the AD8066 is a dual amplifier. These amplifiers are developed in the Analog Devices, Inc. proprietary XFCB process and allow exceptionally low noise operation (7.0 nV/ $\sqrt{\text{Hz}}$ and 0.6 fA/ $\sqrt{\text{Hz}}$) as well as very high input impedance.

With a wide supply voltage range from 5 V to 24 V, the ability to operate on single supplies, and a bandwidth of 145 MHz, the AD8065/AD8066 are designed to work in a variety of applications. For added versatility, the amplifiers also contain rail-to-rail outputs.

Despite the low cost, the amplifiers provide excellent overall performance. The differential gain and phase errors of 0.02% and 0.02° , respectively, along with 0.1 dB flatness out to 7 MHz, make these amplifiers ideal for video applications. Additionally, they offer a high slew rate of 180 V/µs, excellent distortion (SFDR of -88 dBc @ 1 MHz), extremely high common-mode rejection of -100 dB, and a low input offset voltage of 1.5 mV maximum under warmed up conditions. The AD8065/AD8066 operate using only a 6.4 mA/amplifier typical supply current and are capable of delivering up to 30 mA of load current.

The AD8065/AD8066 are high performance, high speed, FET input amplifiers available in small packages: SOIC-8, MSOP-8, and SOT-23-5. They are rated to work over the industrial temperature range of -40° C to $+85^{\circ}$ C.

The AD8065WARTZ-R7 is fully qualified for automotive applications. It is rated to operate over the extended temperature range (-40° C to $+105^{\circ}$ C), up to a maximum supply voltage range of ± 5 V only

Features Qualified for automotive applications FET input amplifier 1 pA input bias current Low cost High speed: 145 MHz, -3 dB bandwidth> 180 V/µs slew rate> Low noise $7 \text{ nV/}\sqrt{\text{Hz}}$ $0.6 \text{ fA/}\sqrt{\text{Hz}}$ Wide supply voltage range: 5 V to 24 V Single-supply and rail-to-rail output Low offset voltage 1.5 mV maximum High common-mode rejection ratio: -100 dB Excellent distortion specifications SFDR -88 dBc @ 1 MHz Low power: 6.4 mA/amplifier typical supply current No phase reversal

Application

Automotive driver assistance systems

Photodiode preamps

Filters

A/D drivers

Level shifting

Buffering

Small packaging: SOIC-8, SOT-23-5, and MSOP-8



Related Products



AD8418BRMZ-RL

Analog Devices, Inc MSOP-8



ADA4084-2ARMZ

Analog Devices, Inc MSOP-8



ADA4528-2ARMZ-R7

Analog Devices, Inc MSOP-8



AD8062ARMZ

Analog Devices, Inc MSOP8



AD8567ARUZ
Analog Devices, Inc
TSSOP-14



Analog Devices, Inc SOP23

AD8628AUJZ



AD8022ARMZ
Analog Devices, Inc
MSOP-8



AD8041AR
Analog Devices, Inc
SOP-8