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## AD8066ARMZ-REEL7

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Data Sheet

High Performance, 145 MHz FastFET™ Op Amp; Package: MSOP; No of Pins: 8; Temperature Range: Industrial

Manufacturers	Analog Devices, Inc	The second se
Package/Case	MSOP-8	
Product Type	Amplifier ICs	Sta
RoHS	Rohs	
Lifecycle		Images are for reference only
Please submit RFQ for AD8066ARMZ-REEL7 or Email to us: sales@ovaga.com We will contact you in 12 hours.		

### **General Description**

The AD8065/AD80661 FastFET<sup>TM</sup> 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  $0.02^\circ$ , 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  $-40^{\circ}$ C to  $+85^{\circ}$ C.

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

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

#### **Related Products**



Analog Devices, Inc MSOP-8

AD8418BRMZ-RL



MSOP-8 ADA4084-2ARMZ

Analog Devices, Inc MSOP-8





ADA4528-2ARMZ-R7

Analog Devices, Inc MSOP-8

#### AD8062ARMZ

Analog Devices, Inc MSOP8

## Application

Automotive driver assistance systems

Photodiode preamps

Filters

A/D drivers

Level shifting

Buffering



AD8567ARUZ

Analog Devices, Inc TSSOP-14



AD8628AUJZ

Analog Devices, Inc SOP23



AD8022ARMZ

Analog Devices, Inc MSOP-8



<u>AD8041AR</u>

Analog Devices, Inc SOP-8