AD8000YRDZ

Data Sheet

Current Feedback, Op Amp, 1.5MHz, 5 V, 9 V, 8-Pin SOIC

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

Images are for reference only

Please submit RFQ for AD8000YRDZ or Email to us: sales@ovaga.com We will contact you in 12 hours. RFQ

General Description

The AD8000 is an ultrahigh speed, high performance, currentfeedback amplifier. Using Analog Devices, Inc., proprietaryeXtra Fast Complementary Bipolar (XFCB) process, the amplifiercan achieve a small signal bandwidth of 1.5 GHz and a slewrate of 4100 V/µs.

The AD8000 has low spurious-free dynamic range (SFDR) of75 dBc at 20 MHz and input voltage noise of 1.6 nV/√Hz. TheAD8000 can drive over 100 mA of load current with minimaldistortion. The amplifier can operate on +5 V to ±6 V. Thesespecifications make the AD8000 ideal for a variety of applications,including high speed instrumentation.

With a differential gain of 0.02%, differential phase of 0.01°, and0.1 dB flatness out to 170 MHz, the AD8000 has excellent videospecifications, which ensure that even the most demandingvideo systems maintain excellent fidelity.

The AD8000 power-down mode reduces the supply current to1.3 mA. The amplifier is available in a tiny 8-lead LFCSP package,as well as in an 8-lead SOIC package. The AD8000 is rated to workover the extended industrial temperature range (−40°C to +125°C).A triple version of the AD8000 (AD8003) is underdevelopment.

Features

High speed

1.5 GHz, −3 dB bandwidth>

650 MHz, full power bandwidth = 2 V p-p)

Slew rate: 4100 V/μs

0.1% settling time: 12 ns

Excellent video specifications

0.1 dB flatness: 170 MHz

Differential gain: 0.02%

Differential phase: 0.01°

Output overdrive recovery: 22 ns

Low noise: 1.6 nV/√Hz input voltage noise

Low distortion over wide bandwidth

75 dBc SFDR at 20 MHz

62 dBc SFDR at 50 MHz

Input offset voltage: 1 mV typical

High output current: 100 mA

Wide supply voltage range: 4.5 V to 12 V

Supply current: 13.5 mA

Power-down mode

Application

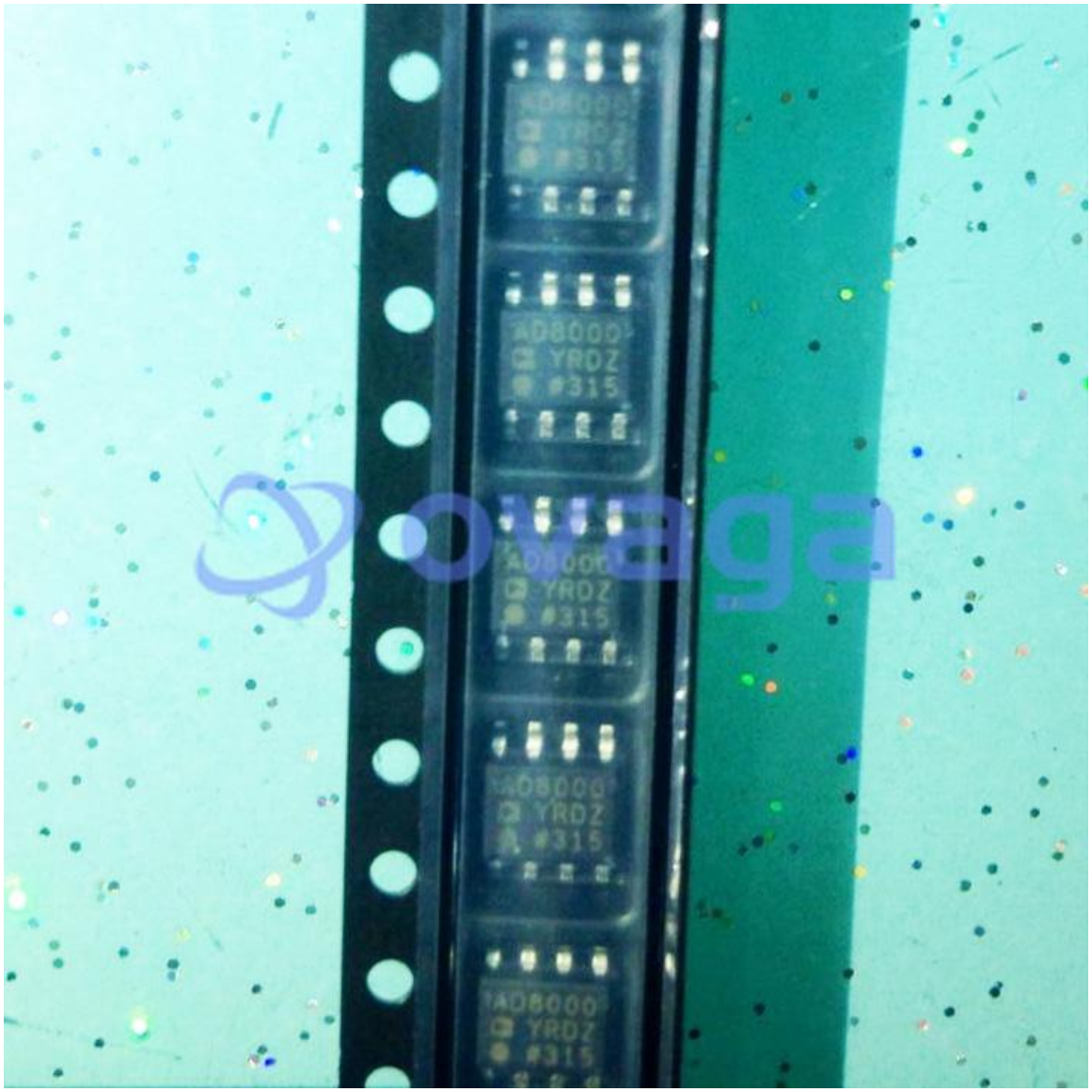
Professional video

High speed instrumentation

Video switching

IF/RF gain stage

CCD imaging



Related Products

[AD8418BRMZ-RL](#)

Analog Devices, Inc

MSOP-8

[ADA4528-2ARMZ-R7](#)

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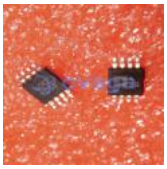

[ADA4084-2ARMZ](#)

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[AD8022ARMZ]

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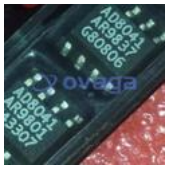

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Analog Devices, Inc

SOP-8