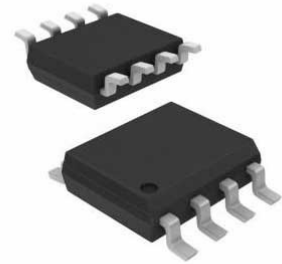


Op Amp Single High Speed Amplifier $\pm 15V/30V$ 8-Pin SOIC

Tube



Images are for reference only

[Inquiry](#)

Manufacturer: [Texas Instruments, Inc](#)

Package/Case: SOP-8

Product Type: Amplifier ICs

RoHS: RoHS Compliant/Lead free 

Lifecycle: Active

General Description

The THS4631 is a high-speed, FET-input operational amplifier designed for applications requiring wideband operation, high-input impedance, and high-power supply voltages. By providing a 210-MHz gain bandwidth product, ± 15 -V supply operation, and 100-pA input bias current, the THS4631 is capable of simultaneous wideband transimpedance gain and large output signal swing. The fast 1000 V/ μ s slew rate allows for fast settling times and good harmonic distortion at high frequencies. Low current and voltage noise allow amplification of extremely low-level input signals while still maintaining a large signal-to-noise ratio.

The characteristics of the THS4631 make it ideally suited for use as a wideband photodiode amplifier. Photodiode output current is a prime candidate for transimpedance amplification as shown below. Other potential applications include test and measurement systems requiring high-input impedance, ADC and DAC buffering, high-speed integration, and active filtering.

The THS4631 is offered in an 8-pin SOIC (D), and the 8-pin SOIC (DDA) and MSOP (DGN) with PowerPAD package.

Key Features

High Bandwidth:
325 MHz in Unity Gain

210 MHz Gain Bandwidth Product

High Slew Rate:
900 V/ μ s (G = 2)

1000 V/ μ s (G = 5)

Low Distortion of -76 dB, SFDR at 5 MHz

Maximum Input Bias Current: 100 pA

Input Voltage Noise: 7 nV/ $\sqrt{\text{Hz}}$

Maximum Input Offset Voltage: 500 μ V at 25°C

Low Offset Drift: 2.5 μ V/ $^{\circ}$ C

Input Impedance: 109 || 3.9 pF

Wide Supply Range: ± 5 V to ± 15 V

High Output Current: 95 mA

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Recommended For You

THS3092D

Texas Instruments, Inc

SOP-8

THS7316DR

Texas Instruments, Inc

SOP-8

THS4131IDGNR

Texas Instruments, Inc

MSOP8

THS4011CD

Texas Instruments, Inc

SOP

THS7374IPW

Texas Instruments, Inc

TSSOP14

THS6184RHFR

Texas Instruments, Inc

QFN

THS4503IDGN

Texas Instruments, Inc

MSOP8

THS7376IPWR

Texas Instruments, Inc

TSSOP14

THS7314D

Texas Instruments, Inc

SOP8

THS4130IDGK

Texas Instruments, Inc

MSOP8

THS7353PW

Texas Instruments, Inc

TSSOP20

THS4551IRGTR

Texas Instruments, Inc

VQFN16

THS4281D

Texas Instruments, Inc

SOIC-8

THS3061DGN

Texas Instruments, Inc

MSOP8

THS3062D

Texas Instruments, Inc

SOIC8