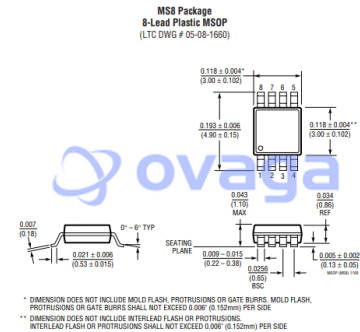


Operational Amplifier, Dual, 2 Amplifier, 325 MHz, 125 V/ $\mu$ s, 2.5V to 12.6V, MSOP, 8 Pins

Manufacturers	<a href="#">Analog Devices, Inc</a>
Package/Case	MSOP-8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LT1807IMS8#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

## General Description

The LT1806/LT1807 are single/dual low noise rail-to-rail input and output unity-gain stable op amps that feature a 325MHz gain-bandwidth product, a 140V/ $\mu$ s slew rate and a 85mA output current. They are optimized for low voltage, high performance signal conditioning systems.

The LT1806/LT1807 have a very low distortion of  $-80\text{dBc}$  at 5MHz, a low input referred noise voltage of  $3.5\text{nV}/\sqrt{\text{Hz}}$  and a maximum offset voltage of  $550\mu\text{V}$  that allows them to be used in high performance data acquisition systems.

The LT1806/LT1807 have an input range that includes both supply rails and an output that swings within 20mV of either supply rail to maximize the signal dynamic range in low supply applications.

The LT1806/LT1807 maintain their performance for supplies from 2.5V to 12.6V and are specified at 3V, 5V and  $\pm 5\text{V}$  supplies. The inputs can be driven beyond the supplies without damage or phase reversal of the output.

The LT1806 is available in an 8-pin SO package with the standard op amp pinout and a 6-pin SOT-23 package. The LT1807 features the standard dual op amp pinout and is available in 8-pin SO and MSOP packages. These devices can be used as plug-in replacements for many op amps to improve input/output range and performance.

## Features

Gain Bandwidth Product: 325MHz

Slew Rate: 140V/ $\mu$ s

Wide Supply Range: 2.5V to 12.6V

Large Output Current: 85mA

Low Distortion, 5MHz: -80dBc

Low Voltage Noise: 3.5nV/ $\sqrt$ Hz

Input Common Mode Range Includes Both Rails

Output Swings Rail-to-Rail

Input Offset Voltage (Rail-to-Rail): 550 $\mu$ V Max

Common Mode Rejection: 106dB Typ

Power Supply Rejection: 105dB Typ

Unity-Gain Stable

Power Down Pin (LT1806)

Operating Temperature Range: -40°C to 85°C

Single in SO-8 and 6-Pin Low Profile (1mm)ThinSOT™ Packages

Dual in SO-8 and 8-Pin MSOP Packages

## Application

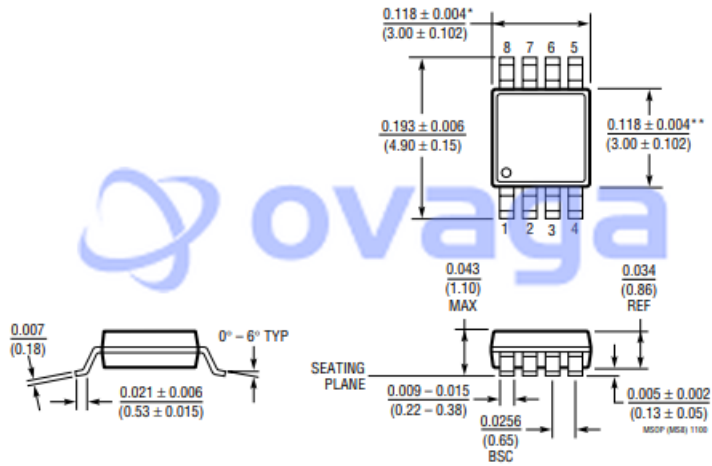
Low Voltage, High Frequency Signal Processing

Driving A/D Converters

Rail-to-Rail Buffer Amplifiers

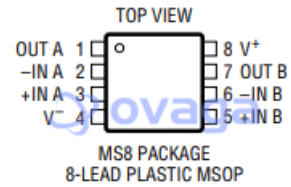
Video Line Driver

**MS8 Package**  
**8-Lead Plastic MSOP**  
 (LTC DWG # 05-08-1660)



\* DIMENSION DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS. MOLD FLASH, PROTRUSIONS OR GATE BURRS SHALL NOT EXCEED 0.006" (0.152mm) PER SIDE

\*\* DIMENSION DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSIONS. INTERLEAD FLASH OR PROTRUSIONS SHALL NOT EXCEED 0.006" (0.152mm) PER SIDE



T<sub>JMAX</sub> = 150°C, θ<sub>JA</sub> = 135°C/W (Note 9)

**Related Products**



[LTC1151CSW#PBF](#)

Analog Devices, Inc  
 SOIC-16



[LT1498CS8](#)

Analog Devices, Inc  
 SOP-8



[LTC2053CMS8](#)

Analog Devices, Inc  
 MSOP8



[LTC1150CN8](#)

Analog Devices, Inc  
 DIP8



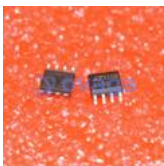
[LT1491ACS](#)

Analog Devices, Inc  
 SOP14



[LT6105IMS8](#)

Analog Devices, Inc  
 MSOP-8



[LTC1150CS8](#)

Analog Devices, Inc  
 SOP8



[LT1013CN8](#)

Analog Devices, Inc  
 DIP-8