

LTC6240HVCS5#TRMPBF

Data Sheet

Operational Amplifier, Rail-to-Rail O/P, 1 Amplifier, 18 MHz, 10 V/ μ s, 2.8V to \pm 5.5V, TSOT-23

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

Package/Case TSOT23

Product Type Amplifier ICs

RoHS Pb-free Halide free

Lifecycle



Images are for reference only

Please submit RFQ for LTC6240HVCS5#TRMPBF or Email to us: sales@ovaga.com We will contact you in 12 hours.

RFO

General Description

The LTC6240/6241/LTC6242 are single, dual and quad low noise, low offset, rail-to-rail output, unity gain stable CMOS op amps that feature 1pA of input bias current. Input bias current is guaranteed to be 1pA max on the single LTC6240. The 0.1Hz to 10Hz noise of only 550nVP-P, along with an offset of just $125\mu V$ are significant improvements over traditional CMOS op amps. Additionally, noise is guaranteed to be less than $10nV/\sqrt{Hz}$ at 1kHz. An 18MHz gain bandwidth, and $10V/\mu s$ slew rate, along with the wide supply range and low input capacitance, make them perfect for use as fast signal processing amplifiers.

These op amps have an output stage that swings within 30mV of either supply rail to maximize the signal dynamic range in low supply applications. The input common mode range extends to the negative supply. They are fully specified on 3V and 5V, and an HV version guarantees operation on supplies up to $\pm 5V$.

The LTC6240 is available in the 8-pin SO and the 5-pin SOT-23 packages. The LTC6241 is available in the 8-pin SO, and for compact designs it is packaged in a tiny dual fine pitch leadless (DFN) package. The LTC6242 is available in the 16-pin SSOP as well as the $5 \text{mm} \times 3 \text{mm}$ DFN package.

Features

0.1Hz to 10Hz Noise: 550nVP-P

Input Bias Current:

0.2pA (Typ at 25°C)

1pA Max (LTC6240)

Low Offset Voltage: 125µV Max

Low Offset Drift: 2.5µV/°C Max

Gain Bandwidth Product: 18MHz

Output Swings Rail-to-Rail

Supply Operation:

2.8V to 6V LTC6240/LTC6241/LTC6242

2.8V to $\pm 5.5V$ LTC6240HV/LTC6241HV/LTC6242HV

Low Input Capacitance

H-Grade Temperature Range: -40°C to 125°C

Single LTC6240 in 5-Pin Low Profile (1mm) ThinSOTTM Package and 8-Pin SO for PCB Guard Ring

Dual LTC6241 in 8-Pin SO and Tiny DFN Packages

Quad LTC6242 in 16-Pin SSOP and 5mm × 3mm DFN Packages

Application

Photo Diode Amplifiers

Charge Coupled Amplifiers

Low Noise Signal Processing

Medical Instrumentation

High Impedance Transducer Amplifier



Related Products



LTC1151CSW#PBF
Analog Devices, Inc
SOIC-16



LTC2053CMS8

Analog Devices, Inc
MSOP8



LT1498CS8

Analog Devices, Inc
SOP-8



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