

Single/Dual Micropower Zero-Drift Operational Amplifiers; Package: SOT; No of Pins: 5;
Temperature Range: -40° to +125°C

Manufacturers	Analog Devices, Inc
Package/Case	SOT-23-5
Product Type	Operational Amplifiers(General Purpose)
RoHS	
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2054HS5#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2054/LTC2055 are low power, low noise, single/dual, zero-drift operational amplifiers with an extended temperature version (LTC2054MP) that has guaranteed specifications from -55°C to 150°C. They are available in SOT-23 (ThinSOT™) and MS8 packages. For space limited applications, the LTC2055 is also available in a 3mm × 3mm × 0.8mm dual fine pitch leadless package (DFN). They operate from a single 2.7V minimum supply and support ± 5V applications. The current consumption is typically 150µA for the LTC2054 and 130µA/amp for the LTC2055.

The LTC2054/LTC2055, despite their miniature size, feature uncompromising DC performance. The maximum input offset voltage and offset drift are 3.0µV and 30nV/°C over the -40°C to 85°C industrial temperature range. The almost zero DC offset and drift are supported with a power supply rejection ratio (PSRR) and common mode rejection ratio (CMRR) of 130dB (typ).

The input common mode voltage ranges from the negative supply up to typically 0.5V below the positive supply. The open-loop gain is typically 140dB. The LTC2054/LTC2055 also feature a 1.6µVP-P DC to 10Hz noise and a 500kHz gain-bandwidth product.

Features

Supply Current 150 μ A (Max per Amplifier) Guaranteed from -40°C to 85°C

Offset Voltage 3 μ V (Max, -40°C to 85°C)

Offset Voltage Drift 30nV/ $^{\circ}\text{C}$ (Max, -40°C to 85°C)

Guaranteed Specifications from -55°C to 150°C (LTC2054MP)

Common Mode Input Range from V_{-} to $V_{+} - 0.5\text{V}$

Output Swings Rail-to-Rail

Voltage Gain: 140dB (Typ)

PSRR and CMRR: 130dB (Typ)

Input Bias Current: 1pA (Typ, 25°C)

Noise: 1.6 μ V_{P-P} (0.01Hz to 10Hz Typ)

Supply Operation:

2.7V to 6V (LTC2054/LTC2055)

2.7V to $\pm 5.5\text{V}$ (LTC2054HV/LTC2055HV)

Low Profile (1mm) SOT-23, MS8 and $3\text{mm} \times 3\text{mm} \times 0.8\text{mm}$ DFN Packages

Application

Thermocouple Amplifiers

Electronic Scales

Medical Instrumentation

Strain Gauge Amplifiers

High Resolution Data Acquisition

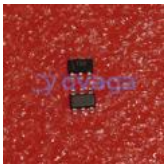
DC Accurate RC Active Filters

Low Side Current Sense

Battery-Powered Systems



Related Products



[LT1616ES6](#)

Analog Devices, Inc
SOT-23-6



[LT1086CT-5](#)

Analog Devices, Inc
TO-220



[LT3469ETS8](#)

Analog Devices, Inc
SOT23-8



[LT1210CT7](#)

Analog Devices, Inc
TO-220-7



[LT3470ITS8](#)

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