

LINEAR TECHNOLOGY LTC2053IDD#PBF Instrument Amplifier, 1 Amplifier, $-5\mu\text{V}$, $0.2\text{V}/\mu\text{s}$, 200kHz, 2.7V to 11V, DFN

Manufacturers	Analog Devices, Inc
Package/Case	DFN8
Product Type	Amplifier ICs
RoHS	Pb-free Halide free
Lifecycle	



Images are for reference only

Please submit RFQ for LTC2053IDD#PBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC2053 is a high precision instrumentation amplifier. The CMRR is typically 116dB with a single or dual 5V supply and is independent of gain. The input offset voltage is guaranteed below $10\mu\text{V}$ with a temperature drift of less than $50\text{nV}/^\circ\text{C}$. The LTC2053 is easy to use; the gain is adjustable with two external resistors, like a traditional op amp.

The LTC2053 uses charge balanced sampled data techniques to convert a differential input voltage into a single ended signal that is in turn amplified by a zero-drift operational amplifier.

The differential inputs operate from rail-to-rail and the single-ended output swings from rail-to-rail. The LTC2053 can be used in single-supply applications, as low as 2.7V. It can also be used with dual $\pm 5.5\text{V}$ supplies. The LTC2053 requires no external clock, while the LTC2053-SYNC has a CLK pin to synchronize to an external clock.

The LTC2053 is available in an MS8 surface mount package. For space limited applications, the LTC2053 is available in a $3\text{mm} \times 3\text{mm} \times 0.8\text{mm}$ dual fine pitch leadless package (DFN).

Features

116dB CMRR Independent of Gain

Maximum Offset Voltage: 10 μ V

Maximum Offset Voltage Drift: 50nV/ $^{\circ}$ C

Rail-to-Rail Input

Rail-to-Rail Output

2-Resistor Programmable Gain

Supply Operation: 2.7V to \pm 5.5V

Typical Noise: 2.5 μ VP-P (0.01Hz to 10Hz)

Typical Supply Current: 750 μ A

LTC2053-SYNC Allows Synchronization to External Clock

Available in MS8 and 3mm \times 3mm \times 0.8mm DFN Packages

Application

Thermocouple Amplifiers

Electronic Scales

Medical Instrumentation

Strain Gauge Amplifiers

High Resolution Data Acquisition

Related Products



[LTC1151CSW#PBF](#)

Analog Devices, Inc
SOIC-16



[LT1498CS8](#)

Analog Devices, Inc
SOP-8



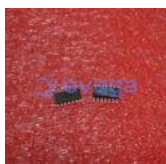
[LTC2053CMS8](#)

Analog Devices, Inc
MSOP8



[LTC1150CN8](#)

Analog Devices, Inc
DIP8



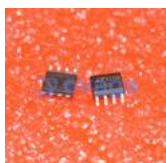
[LT1491ACS](#)

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