MM1278

2023/07/20

Outline

This IC contains two operational amplifiers and achieves extremely low offset voltage with a single power supply. The input offset voltage and the temperature drift of the input offset voltage of these amplifiers are one digit less than those of our conventional products. Since a single power supply can be used, this IC can be operated with the voltage from two batteries. Because of the single power supply, low current consumption, and low offset voltage, this IC is suitable for equipment amplifying micro signals of portable devices using two batteries.

Applications

1.Amplification of very low voltage for sensors (thermocouples, strain gauges, magnetic sensors)
2.Amplification and detection of very low voltage
3.Detection of very low current

Features

(Unless otherwise specified, Topr = +25℃)
General
1.Power supply voltage..... 1.8 to 6.0 V (Suitable for battery-powered devices)
2.Current consumption..... 0.1 mA Typ.

Amplifier section
1.Input voltage range..... -0.2 to 0.3 V
2.Input offset voltage..... ±0.1 mV Typ.
3.Temperature drift of input offset voltage... ±1 μV/℃ Typ.
4.Input offset current..... 1 nA Typ.
5.Input bias current..... 50 nA Typ.
6.Gain..... 100 dB Typ.

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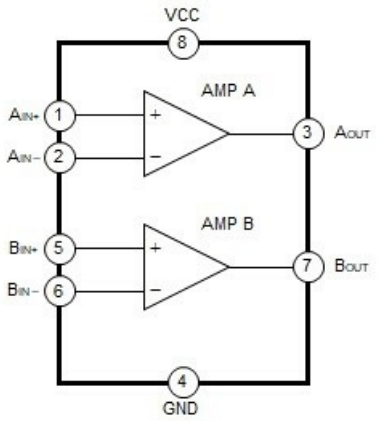
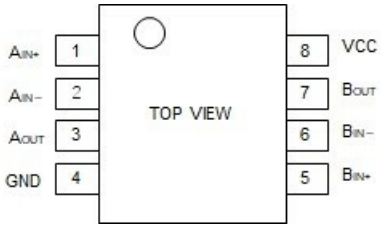
仕様

Power supply voltage lower limit [V]	Power supply voltage upper limit [V]	Input voltage range lower limit [V]	Input voltage range upper limit [V]	Input offset voltage Typ. [mV]	Temperature drift of input offset voltage Typ. [μV/°C]	Gain Typ. [dB]
1.8	6.0	-0.2	0.3	±0.1	±1	100

Block Diagram



Package Image



Package

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SOP-8D