

MCP6002-I/MS

Data Sheet

Operational Amplifier, Dual, 2 Amplifier, 1 MHz, 0.6 V/µs, 1.8V to 6V, MSOP, 8 Pins Manufacturers Microchip Technology, Inc Package/Case MSOP-8 Product Type Amplifier ICs RoHS Rohs Lifecycle Images are for reference only

General Description

The MCP6002 is a dual general purpose op amp offering rail-to-rail input and output over the 1.8 to 6V operating range. This amplifier has a typical GBWP of 1 MHz with typical quiescent current of 100 microamperes. The MCP6002 is available in 8-lead PDIP, SOIC and MSOP packages.

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- Available in SC-70-5 and SOT-23-5 packages 1 MHz Gain Bandwidth Product (typ.) Rail-to-Rail Input/Output Supply Voltage: 1.8V to 5.5V Supply Current: Available in Single, Dual and Quad Packages MCP6001/2/4 Description The Microchip Technology Inc. MCP6001/2/4 family of operational amplifiers (op amps) is specifically designed for general-purpose applications. This family has a 1 MHz gain bandwidth product and 90° phase margin (typ.). It also maintains 45° phase margin (typ.) with 500 pF capacitive load. This family operates from a single supply voltage as low as 1.8V, while drawing 100 μ A (typ.) quiescent current. Additionally, the MCP6001/2/4 supports rail-to-rail input and output swing, with a common mode input voltage range of VDD + 300 mV to V SS 300 mV. This family of operational amplifiers is designed with Microchip's advanced CMOS process. The MCP6001/2/4 family is available in the industrial and extended temperature ranges. It also has a power supply range of 1.8V to 5.5V.Applications

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• Automotive Portable Equipment Photodiode Pre-amps Analog Filters Notebooks and PDAs Battery-Powered Systems Package Types MCP6001 SC-70-5, SOT-23-5 VOUT 1 VSS 2 VIN+ 3 + MCP6002 PDIP, SOIC, MSOP VOUTA 1 VINA– 2 4 VIN– VINA+ 3 VSS 4 A – + B + 8 VDD 7 VOUTB 6 VINB– 5 VINB+ 5 VDD Available Tools Spice Macro Models (at www.microchip.com) FilterLab® Software (at www.microchip.com) Typical Application VDD VIN + MCP6001 VSS R1 R1 [.]

Features

Quiescent Current: 100 µA (typ.)

Supply voltage range: 1.8V to 6V

Rail to Rail Input and Output

Extended Temperature Range

Space Saving Package Offering.8-lead PDIP, SOIC and MSOP

Related Products



MCP6S28-I/SL

Microchip Technology, Inc SOIC-16



MCP6V11T-E/OT Microchip Technology, Inc SOT-23-5



MCP6024-I/SL Microchip Technology, Inc SOIC-14



<u>MCP604-E/SL</u>

Microchip Technology, Inc SOIC-14









MCP6V31T-E/OT

Microchip Technology, Inc SOT-23-5

MCP6L01T-E/OT

Microchip Technology, Inc SOT-23-5

MCP6022-I/SN

Microchip Technology, Inc SOIC-8

MCP602T-I/SN

Microchip Technology, Inc SOIC-8