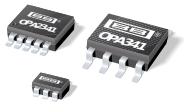
OPA341
OPA2341



SBOS202A – AUGUST 2001

SINGLE-SUPPLY, RAIL-TO-RAIL OPERATIONAL AMPLIFIER WITH SHUTDOWN

*micro*Amplifier™ Series

FEATURES

- RAIL-TO-RAIL INPUT AND OUTPUT SWING
- *Micro*SIZE PACKAGES
- BANDWIDTH: 5.5MHz
- SLEW RATE: 6V/μs
- QUIESCENT CURRENT: 750μA/Chan
- POWER SHUTDOWN MODE

APPLICATIONS

- SENSOR BIASING
- SIGNAL CONDITIONING
- DATA ACQUISITION
- PROCESS CONTROL
- ACTIVE FILTERS
- TEST EQUIPMENT

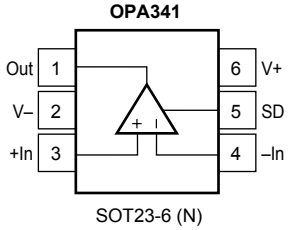
DESCRIPTION

The OPA341 series rail-to-rail CMOS operational amplifiers are designed for low-cost, miniature applications. They are optimized for low-voltage, single-supply operation. Rail-to-rail input and output and high-speed operation make them ideal for driving sampling Analog-to-Digital (A/D) converters.

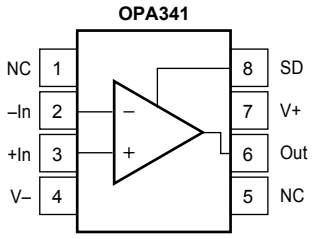
The power-saving shutdown feature makes the OPA341 ideal for portable low-power applications. The OPA341 series is also well suited for general-purpose and audio applications as well as providing I/V conversion at the output of Digital-to-Analog (D/A) converters. Single and dual versions have identical specifications for design flexibility.

The OPA341 series operate on a single supply as low as 2.5V, and input common-mode voltage range extends 300mV beyond the supply rails. Output voltage swings to within 1mV of the supply rails with a 100kΩ load. The OPA341 series offers excellent dynamic response (BW = 5.5MHz, SR = 6V/μs) with a quiescent current of only 750μA. The dual design features completely independent circuitry for lowest crosstalk and freedom from interaction.

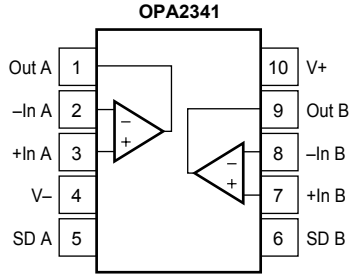
The single (OPA341) packages are the tiny SOT23-6 surface mount and SO-8 surface mount. The dual (OPA2341) comes in the miniature MSOP-10 surface mount. All are specified from –55°C to +125°C and operate from –55°C to +150°C. The OPA343 provides similar performance without shutdown capability.



SOT23-6 (N)



SO-8 (U)



MSOP-10 (DGS)