

Product Overview

NCV952: Operational Amplifier, Wide supply range, 3.5Mhz, Rail to Rail I/O Op-Amp

For complete documentation, see the data sheet.

The NCV952 is a dual, low power, operational amplifier optimized and fully specified for 3 V and 5 V operation. Rail-to-rail output performance over the supply range of 2.7 V to 26 V provides increased dynamic range in single- and split-supply applications. This device offers a gain-bandwidth of 3.5 MHz and a slew rate of 1 V/μs, with only 0.7 mA of quiescent current. The NCV952 is available in a space saving 8-pin TSSOP-8 package.

Features

- Rail-to-rail Input Common Mode Voltage Range
- Rail-to-rail Output Swing
- Wide Supply Range: 2.7 V to 26 V
- Excellent Gain-bandwidth and Speed: 3.5 MHz at 1 V/μs with 3 V Supply
- Low Quiescent Current: 0.7 mA at VS = 3 V per Channel
- PSRR: 105 dB Typical
- NCV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable

Applications

- General Purpose Operational Amplifier
- Active Filter
- Signal Conditioning Amplifiers/ADC Buffer
- Instrumentation and Sensing
- Transformer/Line Drivers

Benefits

- Input signals can extend 200 mV beyond the rails
- Wide output signal swing
- Compatible with a wide range of supply voltages
- Compatible with wide signal frequency range
- Low power consumption
- High immunity to power supply fluctuations
- Meets automotive requirements

End Products

- Set-top Boxes
- Laptop/Notebook Computers
- Personal Entertainment Systems
- Cell Phones and Other Portable Communications
- Portable Headphone Speakers

Part Electrical Specifications

Product	Compliance	Status	Rail to Rail	Channels	V _S Min (V)	V _S Max (V)	I _Q Typ (mA)	V _{OS} Max (mV)	GBW Typ (MHz)	SR Typ (V/μs)	I _O Typ (mA)	ΔV _{OS} /ΔT (μV/°C)	e _N (nV/√Hz)	I _{bias} Typ (pA)	CMRR Typ (dB)	Architecture	Temperature Range (°C)	Package Type
NCV952DTBR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Input /Output	2	2.7	26	0.7	6	3.5	1	10	2	25	55000	80	Bipolar	-40 to 125	TSSOP-8

For more information please contact your local sales support at www.onsemi.com.

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