

製品概要

NCS20071: Operational Amplifier, Wide supply range, 3Mhz CMOS Op-Amp

技術情報は、データシートをご参照ください。

The NCS20071/2/4 series operational amplifiers provide rail-to-rail output operation, 3 MHz bandwidth, and are available in single, dual, and quad configurations. Rail-to-rail operation enables the user to make optimal use of the entire supply voltage range while taking advantage of 3 MHz bandwidth. The NCS2007x can operate on supply voltages as low as 2.7 V over the temperature range of -40°C to 125°C. At a 2.7 V supply, the high bandwidth provides a slew rate of 2.8 V/μs while only consuming 405 μA of quiescent current per channel. The wide supply range allows the NCS2007x to run on supply voltages as high as 36 V, making it ideal for a broad range of applications. Since this is a CMOS device, high input impedance and low bias currents make it ideal for interfacing to a wide variety of signal sensors. The NCx2007x devices are available in a variety of compact packages. Automotive qualified options are available under the NCV prefix.

Product Family:

NCS20071
NCS20072
NCS20074

Channel
1
2
4

Packages
SOT553, SOT23-5
SOIC-8, Micro-8, TSSOP-8
TSSOP-14, SOIC-14

特長

- Wide Supply Range: 2.7 V to 36 V
- Wide Bandwidth: 3 MHz typical at $V_s = 2.7$ V
- Low Supply Current: 405 μA per channel at $V_S = 2.7$ V
- High Slew Rate: 2.8 V/μs typical at $V_S = 2.7$ V
- Low Input Bias Current: 5 pA typical
- Rail-To-Rail Output
- Wide Temperature Range: -40°C to 125°C
- NCV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable

アプリケーション

- Current Sensing
- Signal Conditioning
- Automotive
- Lighting

利点

- Wide supply range suitable for a variety of applications
- Compatible with high speed signals up to 3 MHz
- Low current consumption
- High large signal bandwidth
- High input impedance
- Wide output range
- Functional over wide temperature range
- Meets automotive standards

最終製品

- Notebook Computers
- Portable Instruments
- Power Supplies

電氣的仕様

| 製品 | Pricing (\$/Unit) | 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 _O /ΔT (μV/°C) | e _N (nV/√Hz) | I _{bias} Typ (pA) | CMRR Typ (dB) | Architecture | Temperature Range (°C) | Package Type |
|-----------------|-------------------|---|--------|--------------|----------|------------------------|------------------------|-------------------------|--------------------------|---------------|---------------|-------------------------|-----------------------------|-------------------------|----------------------------|---------------|--------------|------------------------|--------------|
| NCS20071SN2T1G | 0.204 | Pb-free Halide free non AEC-Q and PPAP | Active | Output | 1 | 2.7 | 36 | 0.43 0.48 | 3.5 | 3 | 2.4 | 50 | 2 | 30 | 5 | 135 | CMOS | -40 to 125 | TSOP-5 |
| NCS20071XV53T2G | 0.204 | Pb-free Halide free non AEC-Q and PPAP | Active | Output | 1 | 2.7 | 36 | 0.43 | 3.5 | 3 | 2.4 | 50 | 2 | 30 | 5 | 135 | CMOS | -40 to 125 | SOT-553 |
| NCV20071SN2T1G | 0.2133 | AEC Qualified PPAP Capable Pb-free Halide free | Active | Output | 1 | 2.7 | 36 | 0.41 | 4 | 3 | 2.4 | 50 | 2 | 30 | 5 | 145 | CMOS | -40 to 125 | TSOP-5 |
| NCV20071XV53T2G | 0.2133 | AEC Qualified PPAP Capable Pb-free Halide free | Active | Output | 1 | 2.7 | 36 | 0.43 | 3.5 | 3 | 2.4 | 50 | 2 | 30 | 5 | 135 | CMOS | -40 to 125 | SOT-553 |

詳細は、弊社 www.onsemi.jp の営業または販売代理店にお問い合わせください。

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