

NCS20062

Operational Amplifier, 5.5V Rail-to-Rail Input and Output, 3 MHz, Dual

Product Overview

For complete documentation, see the data sheet.

The NCS2006 series operational amplifiers provide rail-to-rail input and output operation, 3 MHz bandwidth, and are available in single, dual, and quad configurations. Rail-to-rail operation gives designers use of the entire supply voltage range while taking advantage of the 3 MHz bandwidth. The NCS2006 can operate on supply voltages from 1.8 to 5.5 V over a temperature range from -40 to 125°C. At a 1.8 V supply, this device has a slew rate of 1.2 V/ s while consuming only 125 μ A of quiescent current per channel. 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 NCS2006 devices are available in a variety of compact packages.

Product Family:

	NCS20061	NCS20062	NCS20064
Channel	1	2	4
Packages	SOT23-5, SC-70-5	SOIC-8, Micro-8, TSSOP-8	TSSOP-14, SOIC-14

Features

- Rail-to-Rail Input and Output
- Wide Supply Range: 1.8 to 5.5 V
- Wide Bandwidth: 3 MHz
- High Slew Rate: 1.2 V/s at $V_S = 1.8$ V
- Low Supply Current: 125 μ A per Channel at $V_S = 1.8$ V
- Low Input Bias Current: 1 pA Typical
- Wide Temperature Range: -40 to 125°C
- Available in a Variety of Packages
- NCV Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant

For more features, see the data sheet
















Applications

- Unity Gain Buffer
- Battery Powered / Low Quiescent Current Applications
- Low Cost Current Sensing
- Automotive

End Products

- White Goods
- Motor Control

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Rail to Rail	Channels	V _S Min (V)	V _S Max (V)	I _a 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
NCS20062DMR2G	0.216	 	Active	Input/Output	2	1.8	5.5	0.125	3.5	3	1.2	15	1	20	1	79	CMOS	-40 to 125	Micro8
NCS20062DR2G	0.2053	 	Active	Input/Output	2	1.8	5.5	0.125	3.5	3	1.2	15	1	20	1	79	CMOS	-40 to 125	SOIC-8
NCS20062DTBR2G	0.2153	 	Active	Input/Output	2	1.8	5.5	0.125	3.5	3	1.2	15	1	20	1	79	CMOS	-40 to 125	TSSOP-8
NCV20062DMR2G	0.2079	  	Active	Input/Output	2	1.8	5.5	0.125	3.5	3	1.2	15	1	20	1	79	CMOS	-40 to 125	Micro8
NCV20062DR2G	0.2829	  	Active	Input/Output	2	1.8	5.5	0.125	3.5	3	1.2	15	1	20	1	79	CMOS	-40 to 125	SOIC-8
NCV20062DTBR2G	0.2198	  	Active	Input/Output	2	1.8	5.5	0.125	3.5	3	1.2	15	1	20	1	79	CMOS	-40 to 125	TSSOP-8