NCS20166

Precision Operational Amplifier, Low Offset, 10 MHz, Rail-to-Rail Input / Output

Product Overview

For complete documentation, see the data sheet.

The NCS20166 features rail-to-rail input and output, and 10MHz bandwidth. This low quiescent current, low noise amplifier is trimmed to provide a low initial input offset voltage. This op amp operate over a supply range from 3.0V to 5.5V. All versions are specified for operation from -40°C to +125°C.

Features

- Bandwidth equal to 10 MHz
- Low offset voltage of 550µV
- Low voltage noise of 10nV/√Hz
- Rail to Rail input and output

Benefits

- Fast signal acquisition
- Improves signal accuracy
- Minimize signal distortion
- Allows input and output range to the Vcc rail.

Applications

- Current sensing in motor control
- Precision instrumentation
- Sensor signal conditioning

End Products

- Industrial control systems
- Power supplies
- Automotive

Part Electrical Specifications

Product	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)	$\Delta V_{OS}/\Delta T$ (µV/C)	e_N (nV/√Hz)	I_{bias} Typ (pA)	CMRR Typ (dB)	Architecture	Temperature Range (°C)	Package Type
NCS20166SN2T1G	0.26	Pb H	Active	Input/Output	1	3	5.5	1.25	0.55	10	6	25	1	10	1	92	CMOS	-40 to 125	SC-74A
NCV20166SN2T1G	0.3	A P Pb H	Active	Input/Output	1	3	5.5	1.25	0.55	10	6	25	1	10	1	92	CMOS	-40 to 125	SC-74A