

NTE1529 Integrated Circuit Dual OP Amp

Description:

The NTE1529 is a dual operational Amplifier with a phase compensation circuit built-in. It is suited for application to various electronic circuits such as active filters and audio preamplifiers.

Features:

- Phase Compensation Circuit
- High Gain, Low Noise
- Output Short-Circuit Protection
- Two Circuits Symmetrically Arranged in 9-Lead plastic SIP Package

Absolute Maximum Ratings: ($T_A = +25^\circ\text{C}$ unless otherwise specified)

Voltage, Supply Voltage, V_{CC} , V_{EE} $\pm 18\text{V}$
Differential Input Voltage, V_{ID} $\pm 30\text{V}$
Common-Mode Input Voltage, V_{ICM} $\pm 15\text{V}$
Power Dissipation, P_D 500mW
Operating Ambient Temperature Range, T_{opr} -20° to $+75^\circ\text{C}$
Storage Temperature Range, T_{stg} -55° to $+125^\circ\text{C}$

Electrical Characteristics: ($V_{CC} = 15\text{V}$, $V_{EE} = -15\text{V}$, $T_A = +25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Offset Voltage	$V_{I(\text{offset})}$	$R_S \leq 10\text{k}\Omega$	—	0.5	6	mV
Input Offset Current	I_{10}		—	5	200	nA
Input Bias Current	I_{BIAS}		—	—	500	nA
Voltage Gain	G_V	$R_L \geq 2\text{k}\Omega$, $V_O = \pm 10\text{V}$	86	100	—	dB
Maximum Output Voltage	$V_{O(\text{max})}$	$R_L \geq 10\text{k}\Omega$	± 12	± 14	—	V
		$R_L \geq 2\text{k}\Omega$	± 10	± 13	—	V
Common-Mode Input Voltage Width	V_{CM}		± 12	± 14	—	V
Common-Mode Rejection Ratio	CMR		70	90	—	dB
Supply Voltage Rejection Ratio	SVR		—	30	150	$\mu\text{V/V}$
Power Consumption	P_C	$R_L = \infty$	—	90	170	mW
Slew Rate	SR	$R_L \geq 2\text{k}\Omega$	—	1.0	—	V/ μs
Input Referred Noise Voltage	V_{ni}	$R_S = 1\text{k}\Omega$, $B = 10\text{Hz} \sim 30\text{kHz}$	—	2.5	—	μV_{rms}

Pin Connection Diagram
(Front View)

