

NTE1718 Integrated Circuit Dual Comparator

Description:

The NTE1718 is an dual voltage comparator integrated circuit in a 9-Lead SIP type package with a wide range of supply voltages.

Features:

- Wide Range of Operating Voltages:
Single Supply: 2V to 36V
Dual Supply: $\pm 1V$ to $\pm 18V$
- Low Circuit Current: 0.6mA Typ.
- Wide Range of Common-Mode Input Voltages:
Single Supply: 0V to $V_{CC}-1.5V$
- Open Collector Output

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

Supply Voltage, V_{CC}	36V
Common-Mode Input Voltage, V_{ICM}	-0.3V to +36V
Differential Input Voltage, V_{ID}	36V
Output Applied Voltage, V_1, V_7	24V
Power Dissipation, P_D	500mW
Operating Ambient Temperature Range, T_{opr}	-30° to $+85^\circ C$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ C$

Electrical Characteristics: ($V_{CC} = 5V$, $T_A = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Offset Current	$V_{I(Offset)}$		—	1	5	mA
Input Offset Current	I_{IO}		—	—	50	nA
Input Bias Current	I_{Bias}		—	—	250	nA
Voltage Gain	G_V	$R_L = 15k\Omega$	—	200	—	V/mV
Common-Mode Input Voltage Range	V_{CM}		0	—	$V_{CC}-1.5$	V
Supply Current	I_{CC}	$R_L = \infty$	—	0.6	1.5	mA
Response Time	t_r	$R_L = 5.1k\Omega$, $V_{RL} = 5V$	—	1.3	—	μs
Output Sink Current	I_{Sink}	$V_{REF} = 0V$, $V_{IN} = 1V$, $V_O \leq 1.5V$	10	—	—	mA
Low Level Output Voltage	V_{OL}	$V_{REF} = 0V$, $V_{IN} = 1V$, $I_{Sink} = 3mA$	—	0.2	0.4	V
Output Pin Leakage Current	$I_{O(Leak)}$	$V_{IN} = 0V$, $V_{REF} = 1V$, $V_O = 5V$	—	0.1	—	nA

Pin Connection Diagram
(Front View)

