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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°C
Storage Temperature Range, T_{stg}	-55° to +150°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)

