ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

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: ±1V to ±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°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°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 = 15kΩ	–	200	–	V/mV
Common–Mode Input Voltage Range	V_{CM}		0	–	V_{CC}–1.5	V
Supply Current	I_{CC}	R_L = ∞	–	0.6	1.5	mA
Response Time	t_r	R_L = 5.1kΩ, V_{RL} = 5V	–	1.3	–	µs
Output Sink Current	I_{Sink}	V_{REF} = 0V, V_{IN} = 1V, $V_O \le$ 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)



