

NTE7091 Integrated Circuit Dual, Bi-Directional Motor Driver

Description:

The NTE7091 is an integrated circuit in a 10-Lead SIP type package designed for forward/reverse direction select driver by switching motor 1 or motor 2 with a brush. Forward/reverse direction select of motor 1 or motor 2 can be made by 3-bit input logic. It also assures five outputs of both brakes and is suitable for VCR tape loading and cassette loading, video disc players, etc.

Features:

- Wide Range of Operating Supply Voltage: $V_{CC(opr)} = 4V$ to $20V$
- Forward and Reverse Drive of Motor 1 or Motor 2 by 3-Bit Input.
- Built-In Thermal Protection Circuit.

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

Supply Voltage (1), V_{CC1}		-0.5 to +24V
Supply Voltage (2), V_{CC2}		-0.5 to +24V
Supply Current (1), I_{CC1}		20mA
Input Voltage, V_I		-0.5 to $V_{CC1}V$
Motor Rush Allowable Current, I_{OP}		$\pm 1.6A$
Motor Ordinal Current, I_O		$\pm 600mA$
Power Dissipation, P_D		1100mW
Operating Ambient Temperature Range, T_{opr}		-20° to $+75^\circ C$
Storage Temperature Range, T_{stg}		-55° to $+150^\circ C$

Electrical Characteristics: ($T_A = +25^\circ C$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Supply Current	I_{CC1}	$V_4 = V_5 = V_6 = 1V$, $I_O = 0mA$, $V_{CC1} = V_{CC2} = 12V$	—	7	20	mA
Output Leakage Current	$I_{O(leak)}$	$V_{CC1} = V_{CC2} = 20V$, Output Open, $V_O = 0$ or $20V$	—	—	± 100	μA
Low Level Output Voltage	V_{OL}	$I_{OL} = 500mA$	—	—	1.5	V
High Level Output Voltage	V_{OH}	$I_{OH} = -500mA$	10	—	—	V
Output Offset Voltage	$V_{O(offset)}$	$V_R = 6V$, $I_{OH} = -500mA$	-0.5	—	+0.5	V
8-Pin Output Current	I_R	$V_R = 6V$, $I_{OH} = -500mA$	-1.4	—	-0.6	mA

Note 1. Operating Supply Voltage Range: $V_{CC(opr)} = 4V$ to $20V$

Pin Connection Diagram
(Front View)

