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NTE1748 Integrated Circuit DC Motor Driver

Features:

- Linear or Logic Operation
- Bi-Directional Drive Capability

Applications:

- DC Motor for VCR, CD

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

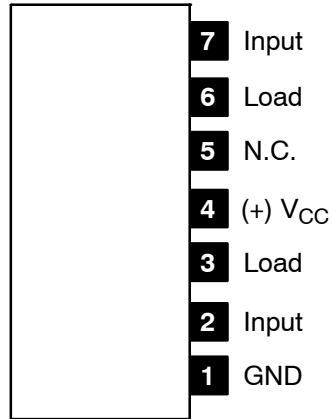
Supply Voltage (Quiescent), V_{CC}	25V
Input Supply Voltage, V_{in}	25V
Output Current, I_C	2A
Power Dissipation ($T_C = +25^\circ\text{C}$, Note 1), P_d	7.5W
Operating Case Temperature, T_C	$+100^\circ\text{C}$
Junction Temperature, T_J	$+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-40° to $+125^\circ\text{C}$

Note 1. P_d is for 1 pc. of TR3, TR6.

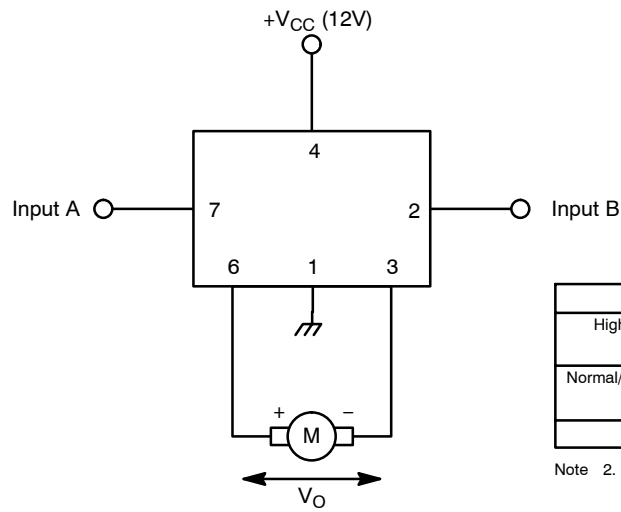
Electrical Characteristics: ($T_A = +25^\circ\text{C}$, $V_{CC} = 12\text{V}$, $R_L = 10\Omega$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	$V_{in} = \text{Open}$	–	11.5	15.0	mA
Input Current 1	$I_i (1)$	$I_O = 500\text{mA}$	–	170	350	μA
Input Current 2	$I_i (2)$	$I_O = 900\text{mA}$, $V_{in} = 12\text{V}$	–	0.34	0.7	mA
Input Voltage	V_i	$I_O = 500\text{mA}$	–	6.45	7.2	V
Output Saturation Voltage 1	$V_{sat} (1)$	$I_{in} = 1\text{mA}$, $V_{in} = 12\text{V}$	–	1.37	2.0	V
Output Saturation Voltage 2	$V_{sat} (2)$	$I_{in} = 1\text{mA}$, $V_{in} = 12\text{V}$	–	0.4	1.0	V
Diode Forward Voltage	V_{df}	$I_F = 1\text{A}$	–	1.2	1.8	V

Pin Connection Diagram (Front View)



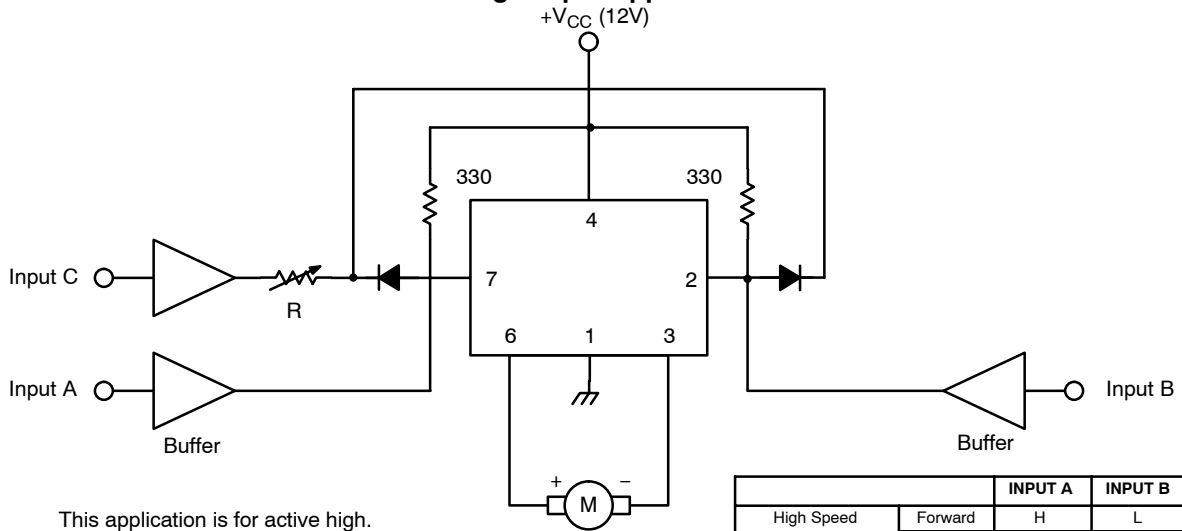
Linear Input Application



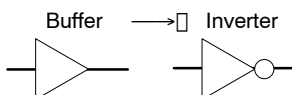
		INPUT A	INPUT B
High Speed	Forward	H	L
	Reverse	L	H
Normal/Low Speed	Forward	MH	L
	Reverse	L	MH
Brake Standby		L	L

Note 2. L: 0V
H: 12V
MH: $\approx V_O$

Logic Input Application



This application is for active high.
For active low, change as follows:



		INPUT A	INPUT B	INPUT C
High Speed	Forward	H	L	H
	Reverse	L	H	H
Normal/Low Speed	Forward	H	L	L
	Reverse	L	H	L
Brake Standby		L	L	L

Note 3. L: 0V
H: 5V

