



ELECTRONICS, INC.
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NTE1825 Integrated Circuit Dual, DC Motor Driver

Features:

- Linear Output Proportional to Input Voltage
- Brake Function Available at Input Open Mode
- Brake Function Available at the Time of Simultaneous Application of Input of Forward/Reverse Rotation
- Brake Function Available at Forward Rotation Mode
- Wide Operating Supply Voltage Range: 3V to 24V
- High Current Gain
- Excellent Stability of Output Voltage in Intermediate Region
- Low Current Dissipation at Braking Mode

Applications:

- Forward/Reverse Rotation of DC Motors (VCR's, VD's, Printers)
- Forward Rotation (With Brake Function) of DC Motors

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

Supply Voltage (Quiescent), V_{CC}	25V
Input Applied 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°C
Junction Temperature, T_J	+150°C
Storage Temperature Range, T_{stg}	-40° to +125°C

Note 1. P_D : Value for each of TR3, TR6, TR9, and TR13.

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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Quiescent Current	I_{CCO}	$V_{in} = \text{Open}$	18	23	30	mA
Input Current	I_{i-1}	$I_O = 500\text{mA}$	–	170	350	μA
	I_{i-2}	$I_O = 900\text{mA}$, $V_{in} = 12\text{V}$	–	0.34	0.7	mA
Input Voltage	V_i	$I_{OUT} = 500\text{mA}$	–	6.45	7.20	V
Output Saturation Voltage	V_{st-1}	$I_{in} = 1\text{mA}$, $V_{in} = 12\text{V}$	–	1.37	2.00	V
	V_{st-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)

