

Functional Description

The Indicator Driver, ID-1A is a simple current switch for applications where speed is not essential as for driving indicator lamps. This module has been designed for use with both the medium speed "A" family and the high speed "B" family.

Medium Speed

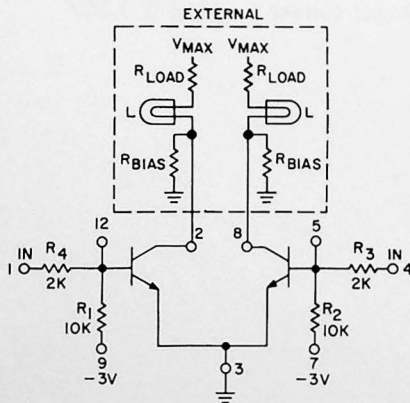
Leave pins 5, 7, 9 and 12 open. The input resistor will load down the normal up level of the driving block (AI-2A, AOI-2A or AI-1A), however the minimum up level will still be above the threshold level.

High Speed

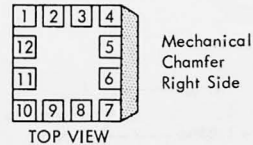
Leave pins 5 and 12 open, connect pins 9 and 7 to -3 volts. The input resistor will load down the normal up level of the driving block (AOI-1B, AOI-2B, AOI-11B or AOI-22B) however the minimum up level will still be above the threshold level.

The driving module can have both an ID module and diode logic circuits, as loads, at the same net.

Schematic



Terminal Configuration



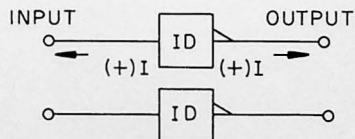
MEDIUM SPEED-

Pins 5, 7, 9 and 12 Leave Open

HIGH SPEED-

Pins 5 and 12 Leave Open

Block Diagram



Maximum Ratings

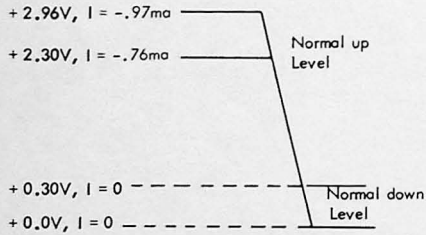
Input Voltage = 6V
 Output Voltage = 8V
 $I_E = 25$ Milliamps

ID-1A Module Functional Tests

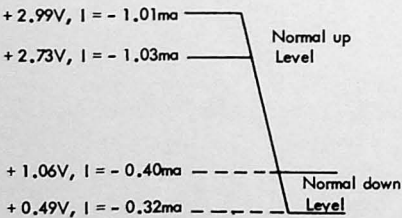
TESTS	TERMINAL CONDITIONS												° C	ADDITIONAL LOAD REQUIREMENTS	VARIABLE	LIMITS		UNITS
	1	2	3	4	5	6	7	8	9	10	11	12				MIN	MAX	
DC ON	+2.3V	V_0	GND											25	307 μ FROM TERM. 2 TO +6.24V	V_0	0.3	V
DC ON			GND	+2.3V				V_0						25	307 μ FROM TERM. 8 TO +6.24V	V_0	0.3	V
DC ON	+2.80V	V_0	GND						-3.12V					25	178 μ FROM TERM. 2 TO -3.12V	V_0	0.3	V
DC ON			GND	+2.80V			-3.12V	V_0						25	178 μ FROM TERM. 8 TO +3.12V	V_0	0.3	V
DC OFF	1.06V	V_0	GND						-2.88V					25	178 μ FROM TERM. 2 TO -2.88V	V_0	2.84	V
DC OFF			GND	1.06V			-2.88V	V_0						25	178 μ FROM TERM. 8 TO -2.88V	V_0	2.84	V

Input Requirements

MEDIUM SPEED



HIGH SPEED



Output Specifications

Output current = - 19ma @ 0.30V
 (pin 7 and 9 should be left open)

Output current = - 14ma @ 0.30V

Maximum Power Dissipation (per module)

	ON	OFF
Medium Speed	23.5m watts	0
High Speed	19.0m watts	4.0m watts

$$\text{Average Normal Power Dissipation} = \frac{\text{NOMINAL ON} + \text{NOMINAL OFF}}{2} = 10.5\text{m watts}$$

General Wiring Rules (for Printed Circuits 10mil width lines)

Input single line length should be less than 12 inches to prevent excessive noise coupling.
Total net length at the input should not exceed 60 inches.