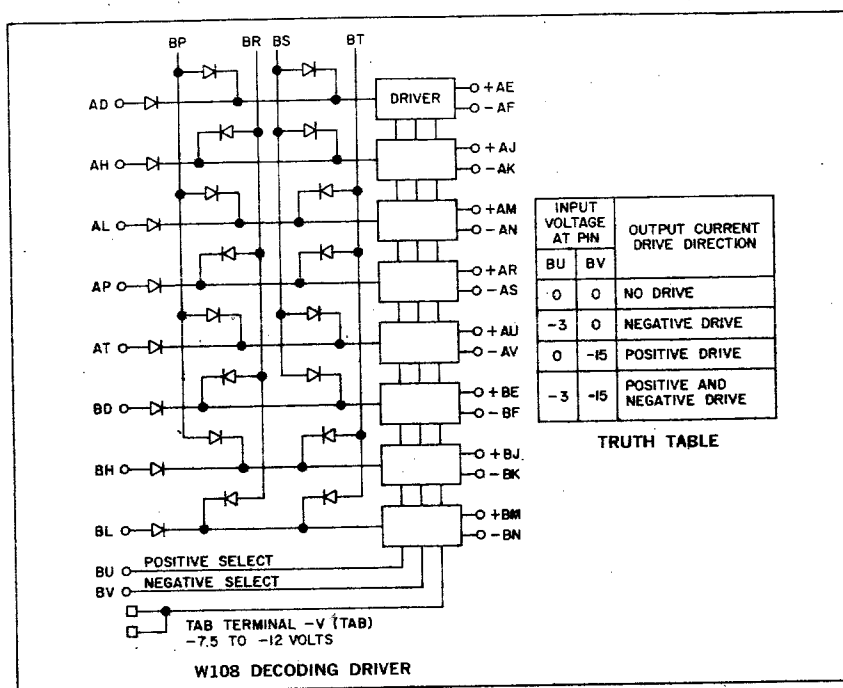


# DECODING DRIVER

## TYPE W108

(DOUBLE HEIGHT)

**W**  
**SERIES**



This driver provides up to 300 ma bipolar drive currents for use in memory systems including core memories, such as the H201, and magnetic tape systems. There are eight drivers on a module, each of which can be selected either by one of eight address lines or by using the built-in binary-to-octal decoding matrix. The drive current direction is selected by one of two input select lines and will be the same for all drivers on a module. Drive current can be varied from 160 ma to 300 ma by adjusting the external negative voltage reference connected to a tab terminal on the module handle.

**INPUTS:** Address selection diode inputs have a 2 ma at ground load shared between all inputs used on each driver. Positive output drive can be selected by a -3 volt signal at pin BU. When pin BU is brought to ground, the input driving source must supply 35 ma per addressed driver. The negative output drive current is selected by a -15 volt signal at Pin BV. This input requires a 25 ma drive at ground independent of driver addressing.

For a complete description of drive current direction selection see the truth table.

The negative voltage reference applied to the tab terminal input may have a voltage range of -7.5 to -15 volts with the current amplitude approximately

determined by the formula

$$I \text{ (ma)} = \frac{\text{Tab Voltage}}{0.048 + \text{External Series Resistance in Kilohms}}$$

This external source must be able to sink the maximum negative drive currents used in the W108. For tab voltages more negative than -12 volts the duty cycle of each negative driver should be such that the average drive current per driver is less than 200 ma. Momentary shorts to the negative drive outputs will cause no module damage.

**OUTPUTS:** All negative current outputs sink current as controlled by the tab voltage. Typical turn-on and turn-off times for the negative current are, respectively, 100 nsec and 1.5 μsec. The positive current driver output must be used in series with a negative current driver, the latter then controls the positive drive current. Each positive output is diode-protected to -15v against inductive backswing.

**POWER:** -15(B)/16 ma plus 35 ma per selected driver  
-V(TAB)/maximum of 250 ma per negative current driver used.

W108 — \$75.00