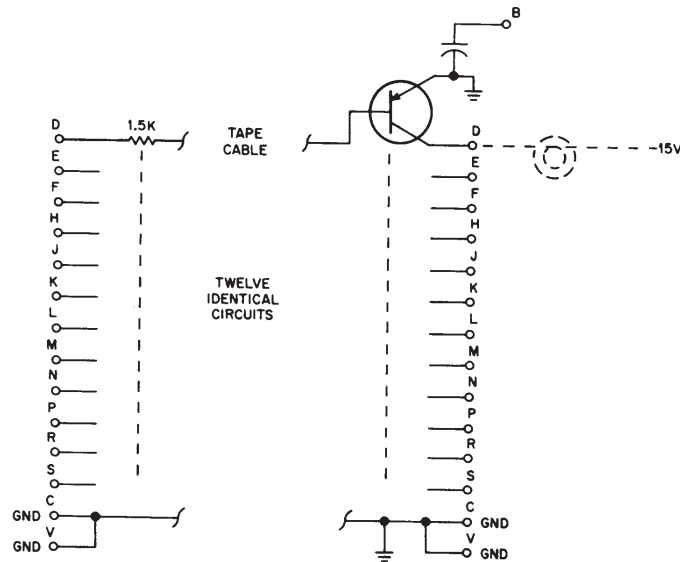


## W012 - W250 INDICATOR DRIVER WITH CABLE

Short (3.25 in.) FLIP CHIP Module, Without Handle, 18 Pins (W012)  
 Standard Size FLIP CHIP Module, 18 Pins (W250)



The W012 - W250 indicator driver consists of a W012 indicator connector and a W250 connector lamp driver connected with Flex Print or Tape Cable. The W012 serves to isolate cable capacity from the logic signals. The W250 will drive 12 lamps returned to -15 V as found on the PDP-10 indicator assemblies provided in the GP10. Locating the lamp driver at the indicator assembly keeps the large indicator currents away from the logic wiring.

**INPUTS:** DEC standard levels of -3 V and ground or the indicator outputs of modules such as the flip-flop in the 1 state turns on the indicator drive. Input load at -3 V is less than 1/40th of the lamp current. No input current is required at ground. For the 40 mA lamps usually used, the input load is less than 1 mA. The circuit will function with either 1.5 k $\Omega$  or 3 k $\Omega$  indicator outputs of flip-flops and similar circuits.

**OUTPUTS:** Each circuit will drive a 40 mA lamp returned to a negative voltage not to exceed -20 V. If an input is driven from -3 V directly (rather than an indicator output) the corresponding output will drive an 80 mA lamp.

**POWER:** No power is required by the W012 or W250. However, the lamp current (up to 960 mA steady state, 2 A transient) must be supported by the ground connections to the W250. Pins C and V of the W250 must be grounded. Connections to pins A and B of either module are optional. Pin B of the W250 should be connected to -15 V to take advantage of the filter provided. The ground

connection carried from pin C and V of the W012 to the W250 is not meant to carry the lamp current and should not be used for this purpose. Grounding pins C and V of the W012 is optional.

The lamp current is drawn from the -15 V supply by the indicator assembly itself.

CABLE: The W012 - W250 Tape Cable assembly is available as DEC part number 7005459. The length must be specified. Length is measured from the back end (handle end) of each connector module.