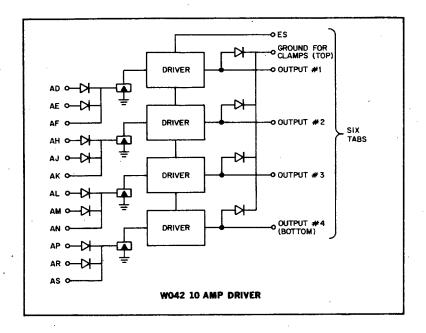
10 AMP DRIVER TYPE W042

(DOUBLE-HEIGHT, DOUBLE-WIDTH MODULE)

W SERIES



This module has four germanium transistor drivers each capable of providing up to ten amperes of DC drive at ambients up to 40°C for heavy loads such as paper tape punches, card punches, hydraulic servo valves, or high-torque stepping motors like Responsyn (T.M. United Shoe) or Slo-Syn (T.M. Superior Electric). In 55°C ambients, up to 8 amps total current may be obtained. AMP "Faston" tabs at the handle end of the module provide high current connections for ground, ES, and the four outputs. Loads are to be connected between the outputs and external ground. Due to the fact that this module may dissipate as much as 20 watts when operated at rated output, special consideration should be given to an unobstructed flow of cooling air. It is recommended that no modules be mounted directly above any W042 operating at more than 4 amps average current. Typical delay: 20 microseconds for the circuit alone. Load current decay time may be much longer, if its inductance is large.

INPUTS: Each input requires 2 ma at ground. Negative input brings corresponding output to ES. Input gates may be expanded with R001 or R002 diode modules, if no more than 6" of wire is connected to each node. All connections are made to the A half (upper) of the module.

OUTPUTS: Total DC current from the W042 may be up to 10 amp, and may be distributed at will among the four outputs. Even higher currents may be obtained briefly by taking into account the 4 minute (approx.) time constant of the heat sink. For example, four 10 amp solenoids can be activated together, as long as they are on only a few seconds and at low duty factors. Outputs are not short circuit protected if shorted to ground. Shorts to output supply voltage are harmless. Clamp diodes are provided from each output to ground to damp transients when turning off inductive loads. Damping-diode ground and all ES power is connected only by tab terminals. Logic ground and +10v power use standard connector pins. Output circuit power supply must be grounded to digital system power externally. Power jumpers Type 914 may be used to make connections. Outputs may not be paralleled to increase short duty peak current, unless 0.10 current-sharing resistors are connected in series with each output.

The negative supply voltage (ES) must be between -12 and -15 volts.

POWER: +10v(A)/180ma; ES/270ma plus output current