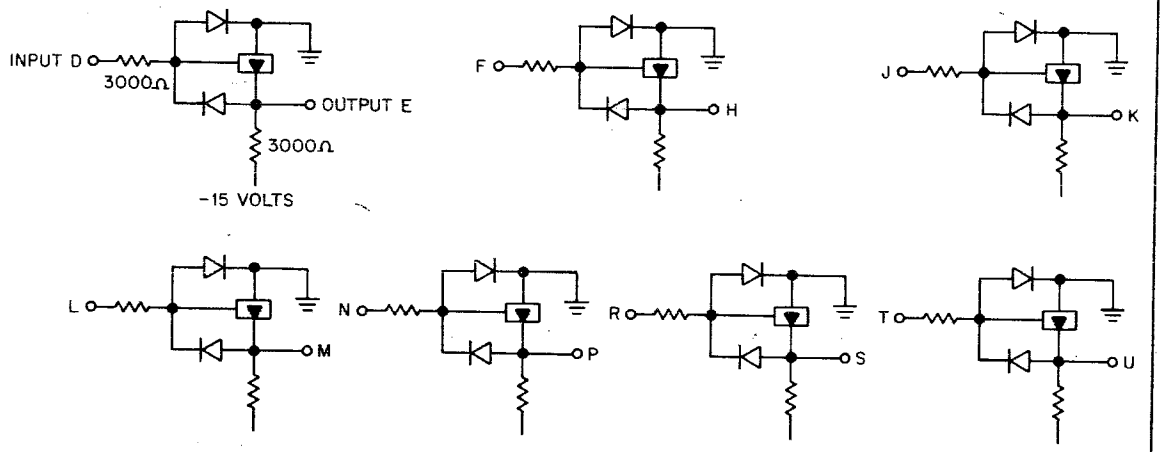
HIGH IMPEDANCE FOLLOWER

TYPE W500

W SERIES



W500 HIGH IMPEDANCE FOLLOWER

High impedance signal sources such as photocells and low-current instrumentation amplifiers can drive Schmitt Trigger W501 or logic gates through a W500 circuit. The module contains 7 fault-protected circuits, each comprising two cascaded emitter-follower amplifiers. Input voltage excursions up to ±30v or short-circuits from output to ground are harmless. Outputs can go as negative as −15v with very light loading, but will not exceed −10v when driving a W501 input.

INPUTS: Excursions Between −0 and −3v: Input currents of 100 μa or less (typically 50) flow toward the driving source, tending to bring it more positive. Low frequency equivalent input resistance exceeds 10KΩ even while the output voltage is passing through the input threshold region of a Schmitt circuit or diode gate. Voltage offset between input and output: less than ±1/3v. **Larger Excursions:** A diode shorts the active components of the follower circuit if the input voltage goes more positive than ground or more negative than −15v, and the input equivalent circuit changes to 3000Ω returned to the limiting voltage. If the output is connected to a clamped load for driving grounded loads such as B-series inverters, the limiting negative voltage changes from −15 to −3v.

OUTPUTS: Excursions Between 0 and −3v: Each circuit can drive up to 15 ma at ground. Driving capability at −3v is 3 ma more than that of any clamped load attached. If the output is brought to ground by a paralleled transistor collector, not only the internal 5 ma load and the external load must be driven, but also the current demanded by the input 3000Ω resistance returned to the negative input voltage present. 10 mc emitters may not be driven. **Larger Excursions:** If no clamped load is attached, each output will follow its input as far negative as its internal 3000Ω resistor to −15 v will drive the load. Output voltage cannot go more positive than ground.

POWER: +10v(A)/18 ma; −15v/35 ma.

W500 — $25.00