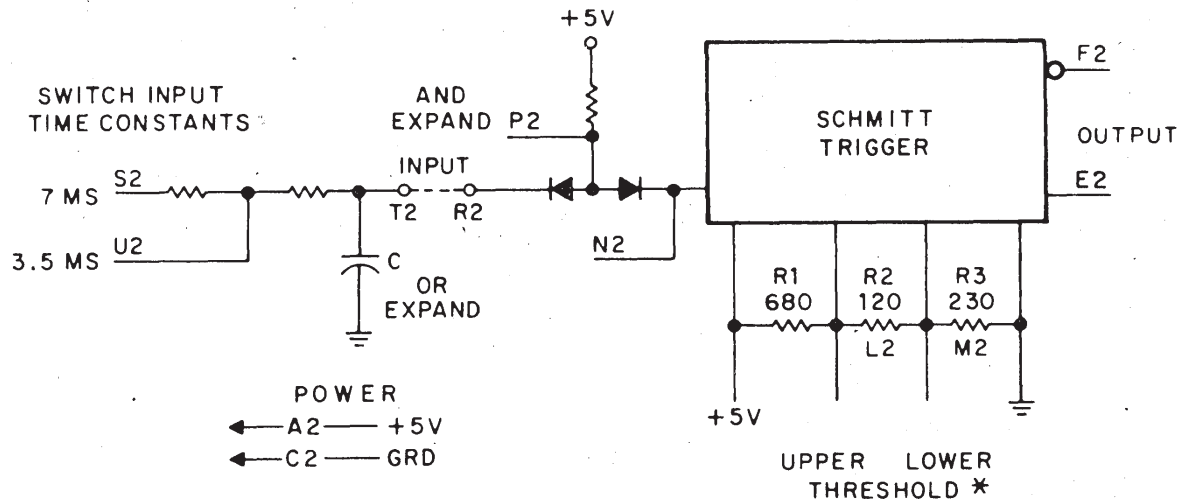


SCHMITT TRIGGER M501

M SERIES

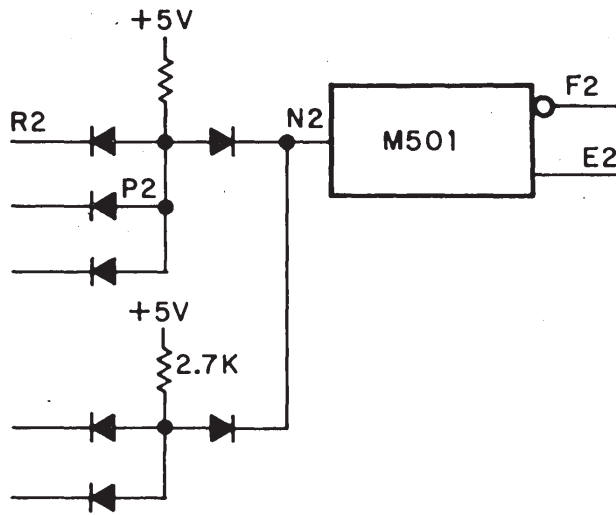


Basically a Schmitt Trigger with variable thresholds, the M501 is used as a Switch Filter, Pulse Shaper and Threshold Detector. Complementary positive logic levels are provided as outputs.

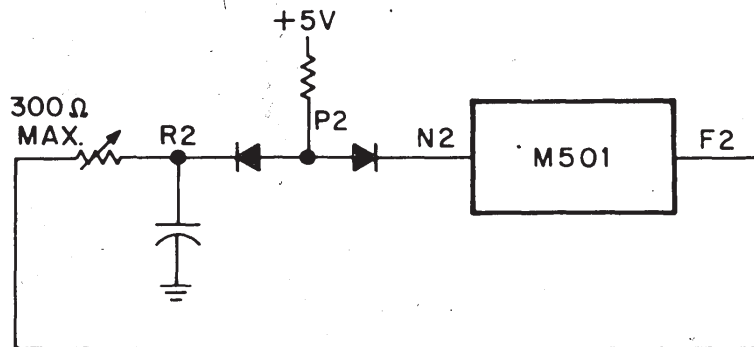
The INPUT on PIN R2 is compared with the thresholds set on PINS L2 and M2, Upper and Lower respectively. AND and OR EXPANSION may be performed on PINS P2 and N2. Module R001 and R002 provide the diodes required. An integrator is provided on the input, allowing SWITCHES to be connected to the Schmitt Trigger with contact bounce effects eliminated. Two switch TIME CONSTANTS are provided. Inputs to PIN S2 result in a 7 m sec TIME CONSTANT, to PIN U2, 3.5 m sec.

The Upper and Lower threshold are preset at 1.7 volts and 1.1 volts. They may be modified by the addition of resistor combination in parallel with the internal network. However, the upper threshold must not exceed 2.0 volts or the lower threshold fall below 0.8 v.

R _x	PARALLEL	R2	—	THRESHOLD CLOSER
R _x	PARALLEL	R1	—	UPPER RISES
R _x	PARALLEL	R3	—	LOWER FALLS



Connecting a resistor from OUTPUT PIN F TO INPUT PIN R with PIN T tied to PIN R forms an oscillator.



Inputs: Input signal swing on PIN R2 is limited to ± 20 volts.

Input Pin R2: 2.7 K Ω to +5 volts or 1.8 ma. at ground.

Pin P2—AND EXPAND input

Pin N2—OR EXPAND input

Pin S2—RC SWITCH INPUT Filter 7 msec

Pin U2—RC SWITCH INPUT Filter 3.5 msec

Pin L2, M2—Available for threshold modification.

Outputs: PIN F2 goes to GROUND when the input on PIN R2 rises above the UPPER threshold, having been below the lower threshold.

PIN F2 rises to +3 volts when the input on PIN R2 falls below the LOWER threshold, having been above the upper threshold.

PIN E2 is the complement of the PIN F2.

PIN E2 can drive ten unit loads.

PIN F2 can drive eight unit loads.

Power: +5 volts at 31 ma. (max.)

M501 — \$25
