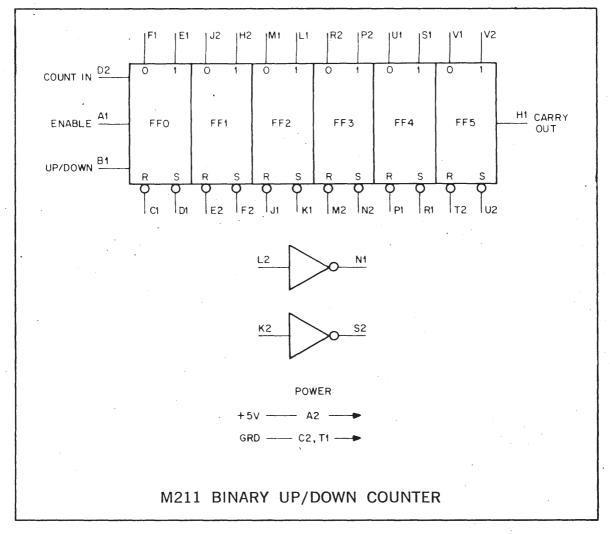
BINARY UP/DOWN COUNTER

M SERIES





The M211 is a 6 bit binary UP/DOWN counter. It can switch counting mode (UP or DOWN) without disturbing the contents of the counter. Maximum count rate is 10 MHz. SET/RESET inputs are available for each bit. Maximum carry propagation time is 80 ns per bit.

The Enable input must be negated before the Up/Down level is switched. Maximum settling time between control level change is 75 ns. The enable input must be asserted 60 ns before the first count. Up count is a high level and down count is a low level. The Carry Out will generate a positive level change whenever a carry or borrow occurs, depending respectively on an up or down counting mode.

Inputs: Count In—positive transition or pulse with less than

400 nsec risetime.

Count In presents 2 unit loads.

Reset — Each reset input presents 3 unit loads

Set — Each set input presents 2 unit loads

All other inputs present 1 unit load

Outputs: Each flip flop output (1 or 0) can drive 8 unit loads. Carry Out can drive 10 unit loads

Each inverter output can drive 30 unit loads

+5.0 volts, 130 ma (avg) Power: