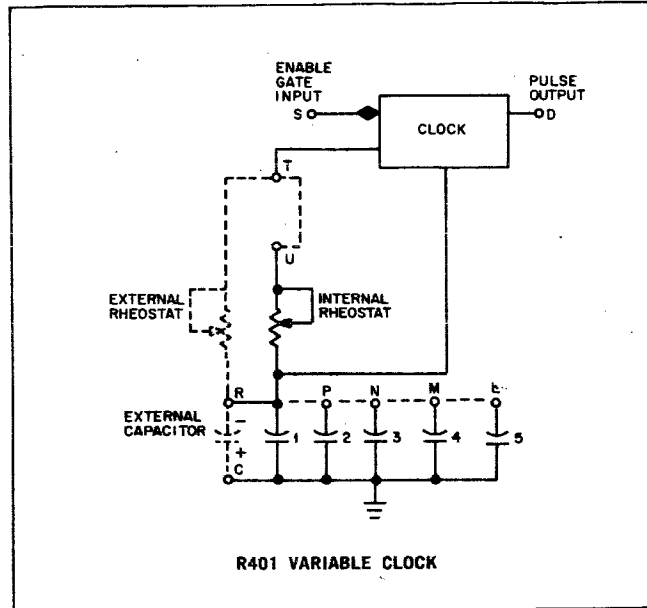


VARIABLE CLOCK TYPE R401

**R
SERIES**



The R401 Variable Clock is a gateable clock that produces standard 100-nsec pulses from a stable RC-coupled oscillator. The variable clock is often used as a primary source of timing for large systems.

The frequency of the R401 Clock is variable from 30 cps to 2.0 mc. Five capacitors provide coarse frequency control, and a built-in 20,000-ohm potentiometer permits fine adjustment. Terminals for an external potentiometer or capacitor are available. The maximum size of the external potentiometer to be used is 20,000 ohms.

FREQUENCY SELECTION

Select Pin R	$C_1 = 82 \text{ pf}$	300 kc to 2.0 mc
Pin P	$C_2 = 1200 \text{ pf}$	30 kc to 375 kc
Pin N	$C_3 = 0.015 \text{ MFD}$	3.5 kc to 40 kc
Pin M	$C_4 = 0.15 \text{ MFD}$	300 cps to 4.5 kc
Pin L	$C_5 = 2.2 \text{ MFD}$	30 cps to 340 cps

Lower frequencies may be obtained by adding an external capacitor between pins R and C. A 20%

change in power supply voltage will change the prf less than 1%. The pulse-to-pulse jitter is less than 0.2%.

INPUT: The clock is enabled by a -3 v level or an open circuit at its enable gate input. The total transition time from the time the gate is enabled until the first pulse reaches 90% of its amplitude is approximately 45 nsec. The pulses that follow appear at the frequency selected. The clock may be disabled by applying a ground level at the enable gate pin S. The enable gate loading is 4 ma at ground. Disable duration must exceed the period to which the clock is set.

OUTPUT: The output is a standard 100 nsec pulse, -3 v to ground. The output can drive 70 ma of external load at ground. The internal load is 3 ma.

POWER: $+10 \text{ v(A)}/1.3 \text{ ma}$; $-15 \text{ v(B)}/19 \text{ ma}$.

R401 — \$45.00