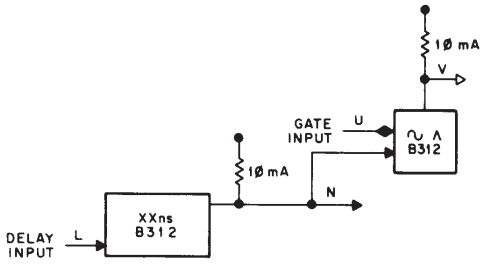
B312 ADJUSTABLE DELAY LINE

Standard Size FLIP CHIP Module, 18 Pins



The B312 is an adjustable delay line with suitable buffering driving a standard 2 mA diode gate. The delay is set by a screwdriver adjustment accessible from the handle end. This module has the same pin connections and can be used in the same slot as the B311 tapped delay line module.

INPUTS: Delay Input - The standard input is a negative 35 ns pulse from a B611 PA. Loading is equivalent to a 250-Ω resistance to ground. For levels, the static input load is -12.5 mA at -3 V, 0 mA at ground; dynamic load is negligible. The input may be driven by a clamped load drawing 15 mA at ground. The B312 may be driven by the output of a 2 mA diode gate with clamped load, but pulses will tend to become wider than normal.

Gate Input - Standard levels of -3 V and ground. Loading is shared by the gate inputs at ground, 0 mA at -3 V. The gate is a 2 mA diode gate.

OUTPUTS: When the delay input is driven with 35 ns negative pulses, output N delivers negative pulses with no overshoot (ground to -3 V) from 40 to 80 ns wide at the -1 V points. If pin U is at -3 V, pin V delivers a positive pulse (-3 V to ground) of the same width.

Pins N and V each drive 22 mA at ground in addition to the clamped loads and other gates tied internally. Each clamped load drives -7 mA at -3 V.

DELAY CONTROL: The delay from pin L to pin N, measured at the -1 V on the waveforms, can be adjusted from 20 ns to 215 ns. The delay from pin N to pin V at the -1 V point depends on the loads at pin N and pin V, but for a fanout of 2 or less from pins N and V and wire runs less than 3 in., 9 to 12 ns delay is typical.

POWER

Pin	Voltage	Margin Range	Current
A	+10 V	+2.5 V to +20 V	4.7 mA
B	-15 V	-10 V to -20 V	34.4 mA
C,M	ground		

Pins C and M must both be grounded.