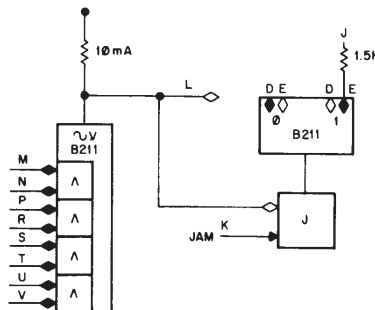


B211 JAM FLIP-FLOP

Standard Size FLIP CHIP Module, 18 Pins



The B211 provides a 2 mA diode gate AND/OR circuit driving a jam flip-flop similar to one half of a B213. It is useful as the memory address register of a PDP-10 memory module.

INPUTS: Diode gate - Standard DEC levels of -3 V and ground. Input load is 2 mA per input pair shared by the grounded inputs. When any pair is not being used, at least one of its inputs must be grounded.

Jam - A standard DEC 40 ns or longer negative pulse or a level change greater than -1 V in 12 ns will set or clear the flip-flop. Input load is -5 mA at -3 V and 31 pF. Maximum repetition rate is 10 MHz. Rise and fall TTT from the jam input to the output is less than 40 ns.

Pin L - Standard DEC levels of -3 V and ground. This pin may be used to expand the input capability of the flip-flop. Load at ground is 12 mA (10 mA clamped load plus 2 mA input load). The clamped load will supply -7 mA at -3 V. The input must be settled at -3 V or ground 20 ns before the jam input is pulsed. If pin L is at ground when the jam input is pulsed, pin E will go negative (the flip-flop will be set).

OUTPUTS: Flip-Flop - Standard levels of -3 V and ground. Each output can drive 36 mA at ground. The internally connected clamped load will supply -7 mA at -3 V (-6 mA at pin E when the indicator output is used).

Indicator - A resistor output is provided to drive an indicator driver circuit such as the W012-W250 indicator driver or the W020-4902 indicator driver with lamp.

Pin L - The output of the diode gate may be used to perform additional logic provided that the set up time required above is met. The diode gate will drive 14 mA in addition to the internally connected loads.

POWER:

Pin	Voltage	Margin Range	Current
A	+10 V	+5 V to +15 V	17 mA
B	-15 V	-12 V to -18 V	82 mA
C	ground		

NOTE

This description applies to B211 flip-flops revision E or later.

CAUTION

The B211 flip-flop may be damaged if its output is grounded when one or more of its inputs is active.