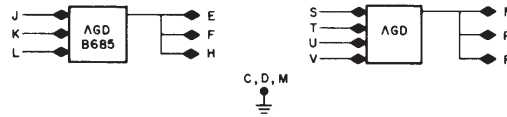


B685 DIODE GATE DRIVER

Standard Size FLIP CHIP Module, 18 Pins



The diode gate driver circuit consists of a diode AND gate controlling a current-mode switch, the output of which is buffered with a complementary emitter follower of asymmetric drive capability. Both circuits are identical except one diode AND gate has four inputs while the other has three. Both circuits are non-inverting.

INPUTS: The input load shared by the diode inputs is 2.5 mA at ground and 0 mA at -3 V. The capacitive load of each input is 11 pF at ground and 4.5 pF at -3 V. Propagation delay is about 20 ns.

OUTPUTS: Each output circuit drives up to 36 2-mA diode gates (or 80 mA) at ground, and sinks up to 8 mA at -3 V. There are three pins per output. The output load should be split among the three pins to allow adequate signal transmission. See the wiring guidelines in Chapter 11 for details. Each output has a separate pin brought out for grounding.

POWER:

Pin	Voltage	Margin Range	Current
A	+10 V	+6 to +16 V	65 mA
B	-15 V	-10 V to -20 V	100 mA
C,D,M	ground		

Pins C, D, and M must all be grounded.