

3.6.2 G284 Disk Writer

The G284 Disk Writer is used to control the direction of the magnetizing current in order to write data in the NRZI format. In conjunction with the G285 and G286 selection modules, the G284 controls the magnetizing current on the selected disk track. The G284 contains two separate circuits that share a common emitter; each circuit is capable of driving 150 mA. Each circuit is driven by complementary outputs of a flip-flop; therefore, only one circuit of the writer is enabled at any one time.

The steady state magnetizing current flows from +10V through the G286, G285, and G284 to -15. Current transitions flow the same way, but ground return is accomplished by AC coupling on separate wires that are isolated from system ground by 10 ohms.

Standard DEC levels enable the G284 with a wave propagation time of less than 50 ns to full rise time at 150 mA write current. The input load is 1 mA shared among the inputs that are at ground potential.

The power requirements for the G284 are shown below.

Pin	Normal Voltage	Marginal Check Limits		Current (mA)
		Min.	Max.	
A	+10	+ 5	+15	2
B	-15	-10	-20	125

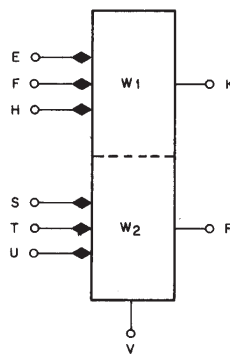


Figure 3-5 Block Diagram, G284 Disk Writer Module

3.6.3 G285 Series Selector Switch

The G285 Series Selector Switch is used with the G286 Center Tap Selector for the selection of the addressed read/write head. The G285 contains two identical circuits, each circuit acts as a

double-pole single-throw switch capable of switching up to 150 mA at 25V. Current flow is unidirectional. The head matrix side of the switch must be biased positive (normally +9V) and the other side negative (normally -13V) with respect to ground.

Standard DEC levels are inputs to the G285. The input load is 1 mA shared among the inputs that are at ground. The input gates at each switch operate as negative AND circuits.

The power requirements for the G285 are shown below.

Pins	Normal Voltage	Marginal Check Limits		Current (mA)
		Min.	Max.	
A	+10	+ 5	+15	25
B	-15	+10	-20	35

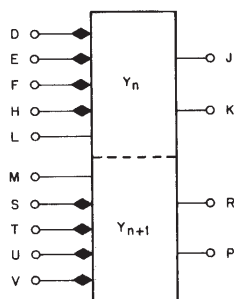


Figure 3-6 Block Diagram, G285 Series Selector Switch Module

3.6.4 G286 Center Tap Selector

The G286 Center Tap Selector is used with the G285 Series Selector Switch to select the addressed read/write head. Each G286 module contains four identical circuits, each capable of supplying 150 mA to the matrix.

Standard DEC levels are inputs to the G286 module. Each input circuit operates as a negative AND circuit. Input load is 1 mA, shared among the inputs that are at ground potential. Inputs F and H may be loaded with up to 4 mA. Ground wave propagation through each circuit is 500 ns maximum for both turn-on and turn-off time.

When not selected, the outputs are biased to -15V. A selected output is +4V. Each circuit can drive a maximum of 150 mA with an external load voltage of up to -15V in reference to +9V.