3.6.7 G680 Disk Head and Matrix

The G680 circuit is mounted on the underside of the base plate assembly and consists of the read/write head, shock mount, and the resistor/diode matrix circuit board. The entire assembly is adjustable on the vertical axis to select the proper tracks and on the horizontal axis, to adjust the flying head gimbal tension. Each assembly contains four read/write heads. The matrix circuit is designed to operate with the G285 and G286 Matrix Selectors. The matrix circuit is capable of withstanding 100V reverse bias when not selected. Resistive values are set to permit 70 mA peak-to-peak current through the head when writing.

The read/write head and the resistor/diode matrix are connected in a delta network configuration. Two legs of the three-leg configuration are resistive legs, and the third is the head coil. This is advantageous because it does not require a center-tap head coil. Therefore, head balance is maintained via the precision resistance of the resistors. The delta network maintains a constant terminal impedance relative to the G083 preamplifier input.

The load is approximately 1000 ohms resistive and 5400 ohms reactive. High frequency noise causes the reactive load to increase to a point where the L/R ratio attenuates the noise amplitude.

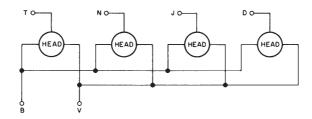


Figure 3-9 Block Diagram, G680 Disk Head and Matrix Module