MAGNETIC HEAD FOR USE WITH QIC-120-DC RECORDING FORMAT
1.0 Mechanical format of the head:

1.1 QIC-105 Channel Layout

1.2 Read effective track width is .0105".

1.3 Write effective track width is .0065".

1.4 Centerline to centerline channel pitch between the write and read channel along the same gap line is .1120".

1.5 Write gap to read gap spacing is .300".

1.6 Erase gap to write channel θ spacing is .305" maximum.

1.7 Read/Write gap length is 40 ".

2.0 Electrical format:

2.1 Recording density: 12,500 flux reversals per inch. GCR.

2.2 Output read head at 12,500 flux reversals per inch and 72 inches per second tape speed: 1.0 mv minimum.

2.3 Read head load: 5k and 15 pf.

2.4 Write saturation current (Isat) at 12,500 FRPI is defined as the current value at the first 95% of the maximum read output.

2.5 Write current (Iw) is set at 110% of the write saturation current value.

2.6 Resolution: Is determined as the ratio: \( \frac{E_0 @ 12,500 \text{ FRPI}}{E_0 @ 4,167 \text{ FRPI}} \times 100\% \)

This ratio shall be a minimum of 50%.

2.7 Magnetic crossfeed:
The ratio of the signal through the read core with one write coil energized at 12,500 FRPI and Iw (no tape moving), to the "read while write" output signal at 12,500 FRPI.

This ratio to be 5% max when the crossfeed output is measured using a band pass filter of 1.4 times the highest operating frequency.

2.8 Peak Shift: See ANSI definition, should be 15% maximum.

2.9 Erase function: The tape shall be AC erased with a frequency of 3.65 mhz and a 12 V maximum voltage supply source. The residual of any signal after one pass erasure shall be less than 3% of the read output of a 12,500 signal.