



# DEVELOPMENT STANDARD

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QIC-106  
Revision C  
11 Feb 87

MAGNETIC HEAD FOR USE WITH  
QIC-40-MB RECORDING FORMAT

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(See important notices on the following page)

## **Important Notices**

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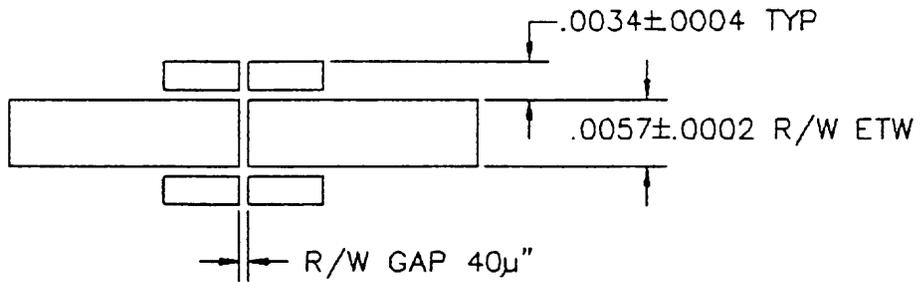
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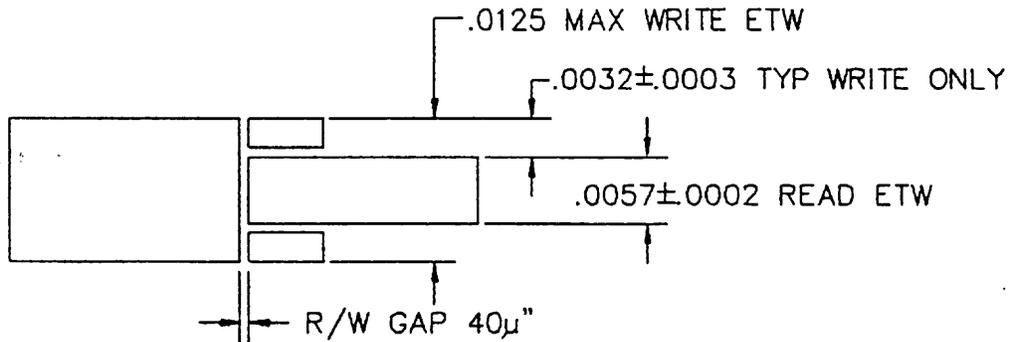
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1.0 The mechanical format of the heads:

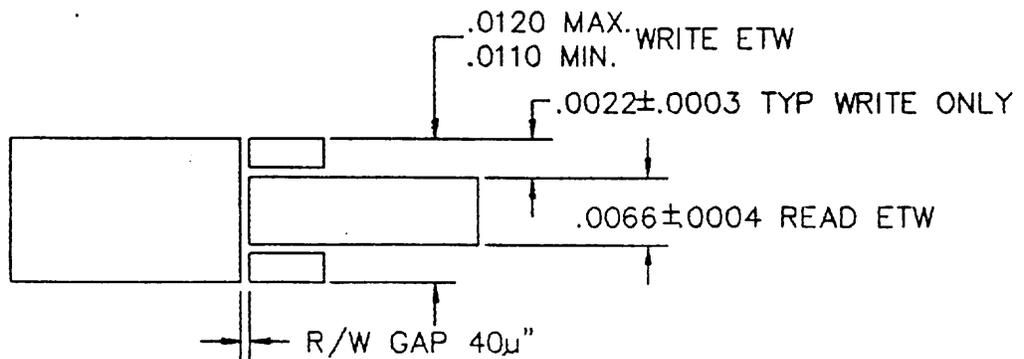
1.1 QIC 106-1, Read/Write with trim erase, channel layout



1.2 QIC 106-2, Wide Write/narrow Read, channel layout.



1.3 QIC 106-3, Wide Write/narrow Read, channel layout.



- 2.00 Electrical format:
- 2.01 Recording density: 10,000 flux reversals per inch. MFM
  - 2.02 Output read head @ 10,000 flux reversals per inch, and 25 inches per second tape speed: 1.5 mv minimum
  - 2.03 Read head load: 5 k and 15 pf.
  - 2.04 Write saturation current ( $I_{sat}$ ) at 10,000 FRPI is defined as the current value at the first 95% of the maximum read output.
  - 2.05 Write current ( $I_w$ ) is set at 110% of the write saturation current value.
  - 2.06 Resolution: Is determined as the ratio:  
$$\frac{E_o @ 10,000 \text{ FRPI}}{E_o @ 5,000 \text{ FRPI}} \times 100\%$$

This shall be a minimum of 65%
  - 2.07 Overwrite: When the longest wave length (5000 FRPI) is overwritten by the shortest wave length (10000 FRPI), a -30db attenuation minimum should be measured by a spectrum analyzer with a sampling band width of less than 5% overall system band width, which is determined by the shortest recorded wave length.
  - 2.08 Peak Shift: See ANSI definition, should nominally be less than 15%.
  - 2.09 Erase function (QIC-106-1): A constant in either leg shall overwrite a 5000 FRPI recorded signal, such that the remnant 5000 FRPI signal is -30db from the nominal output at 10,000 FRPI
  - 2.10 Magnetic isolation to be less than 5%.
  - 2.11 Off track recorded signal to be less than 5%, measured with the read track moved off the recorded track to the isolation shim.