

# Abstracts

## Time-Delay Limits Set by Dispersion in Magnetostatic Delay Lines (Short Papers)

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*M. Bini, L. Millanta, N. Rubino and V. Tognetti. "Time-Delay Limits Set by Dispersion in Magnetostatic Delay Lines (Short Papers)." 1972 Transactions on Microwave Theory and Techniques 20.11 (Nov. 1972 [T-MTT]): 771-773.*

Analysis and experiments show the extreme dispersion of magnetostatic delay lines. A suitable parameter to characterize the amount of dispersion present has been found to be the maximum output energy contained in a time interval equal to the input pulse duration. The time occurrence of this maximum value gives a convenient measure of the group delay. The pulse shape and energy content versus delay have been determined both theoretically and experimentally for axially magnetized circular rods. The results show that delays beyond two to three times the input pulse duration cannot be obtained with more than 50 percent of the output energy contained within the original pulse duration.

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