

# Abstracts

## Measurements and Modeling of Kinetic Inductance Microstrip Delay Lines (1987 Vol. II [MWSYM])

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*J.M. Pond, J.H. Claassen and W.L. Carter. "Measurements and Modeling of Kinetic Inductance Microstrip Delay Lines (1987 Vol. II [MWSYM])." 1987 MTT-S International Microwave Symposium Digest 87.2 (1987 Vol. II [MWSYM]): 925-928.*

Microstrip, with phase velocities of about  $0.01c$ , employing kinetic inductance have been fabricated using niobium nitride and a silicon dielectric. Delay lines employing the phenomenon of kinetic inductance have several advantages for analog signal processing, including low loss and very compact size. An analysis of kinetic inductance microstrip delay lines has been made in the frequency domain and the time domain. The results were compared to theoretical predictions and an accurate circuit model was developed.

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