# Abstracts

## Frequency-Domain Shuttle-Pulse Measurement of Losses and Mode Conversion

*P. Bernardi, F. Bertolani and V. Rizzoli. "Frequency-Domain Shuttle-Pulse Measurement of Losses and Mode Conversion." 1978 Transactions on Microwave Theory and Techniques 26.3 (Mar. 1978 [T-MTT]): 203-209.*

A new method for measuring losses and mode conversion at microwave frequencies is presented. The method consists of producing the impulse response of single- or double-cavity resonant circuits in the frequency domain. To obtain this response, the input reflection coefficient of the circuit to be measured is first changed into a function of time by a swept-frequency technique, and then Fourier-transformed by means of a spectrum analyzer system. High generality of application and repeatability as well as measurement simplicity and definition are the main features of the new method. The examples of application presented include measurement of microstrip-line attenuation constants up to X-band and characterization of mode conversion coefficients in overmoded circular waveguide at millimeter-wave frequencies.

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