Abstracts

Dispersion of Very Short Microwave Pulses in Waveguide

M. Ito. "Dispersion of Very Short Microwave Pulses in Waveguide." 1965 Transactions on Microwave Theory and Techniques 13.3 (May 1965 [T-MTT]): 357-364.

A very short carrier pulse propagating in waveguide is subject to dispersion which causes distortion of both the envelope and the carrier wave of the pulse. The results of a stationary phase analysis of the problem are presented and results of experimental work at X band are described. The spectral separation property of the dispersive line which enables it to operate as an elementary spectrum analyzer are discussed and experimental evidence demonstrating this property is presented.

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