

# Abstracts

## Analysis and Synthesis of Tapered Microstrip Transmission Lines

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*M. Kobayashi and N. Sawada. "Analysis and Synthesis of Tapered Microstrip Transmission Lines." 1992 Transactions on Microwave Theory and Techniques 40.8 (Aug. 1992 [T-MTT]): 1642-1646.*

The input voltage reflection coefficient on a tapered microstrip transmission line is analyzed and a new Fourier transform pair is derived which introduces echo time and frequency as variables. Calculations of the input reflection coefficient take into account the frequency dispersion-characteristics of the effective permittivity. An efficient method is proposed for analysis and synthesis of microstrip tapers and numerical results are presented for microstrip exponential tapers and microstrip Tchebycheff tapers. The present paper is the first one shown the frequency-dependent characteristics of reflection coefficients.

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