# Abstracts

## Explanation and extension of the equivalent circuit approach for parameter extraction [microstrip component analysis]

*C. Schuster and W. Fichtner. "Explanation and extension of the equivalent circuit approach for parameter extraction [microstrip component analysis]." 1999 Microwave and Guided Wave Letters 9.10 (Oct. 1999 [MGWL]): 392-394.*

Recently, there was a contribution by Liou et al. (see ibid., vol. 8, no. 10, p. 330-32, 1998) concerning an equivalent circuit approach for microstrip component analysis using the finite-difference time-domain (FDTD) method. In this work, we give a theoretical explanation for the observed damping of the oscillatory behavior of transmission line parameters extracted from FDTD simulations. In addition, we extend the approach to full one-port parameter extraction of an arbitrary linear system by single-run FDTD simulation using an appropriate set of voltage, current, charge, and magnetic flux data.

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