

Abstracts

Characterization of micromachined transmission lines using MRTD (multiresolution time domain technique)

N. Bushyager and M.M. Tentzeris. "Characterization of micromachined transmission lines using MRTD (multiresolution time domain technique)." 2000 MTT-S International Microwave Symposium Digest 00.1 (2000 Vol. 1 [MWSYM]): 251-254.

The Haar-based MRTD algorithm is extended to 2.5D and is applied to the characterization of micromachined transmission lines. Simulation results of ϵ_{eff} for Si-micromachined finite-ground coplanar waveguides (FG-CPW) as a function of the undercut and for frequencies between 10 GHz and 60 GHz are compared to those obtained by use of conventional FDTD to indicate considerable savings in memory and computational time and demonstrate the adaptive modeling of multiedielectric cells.

[Return to main document.](#)