

Abstracts

MRTD Analysis of Dielectric Cavity Structures

R. Robertson, E. Tentzeris, M. Krumpholz and L.P.B. Katehi. "MRTD Analysis of Dielectric Cavity Structures." 1996 MTT-S International Microwave Symposium Digest 96.3 (1996 Vol. III [MWSYM]): 1861-1864.

Multiresolution time domain (MRTD) analysis is applied to model anisotropic dielectric material. In particular, an MRTD scheme based on scaling functions only is used to analyze different types of resonant cavity structures. The results agree very well with those obtained by FDTD, FEM and integral equation methods. MRTD allows for considerable savings in memory and computational time in comparison to FDTD, while maintaining the same accuracy of the results.

 [Return to main document.](#)