Abstracts

Efficient Analysis of Waveguide Components by FDTD Combined with Time Domain Modal Expansion

F. Alimenti, P. Mezzanotte, L. Roselli and R. Sorrentino. "Efficient Analysis of Waveguide Components by FDTD Combined with Time Domain Modal Expansion." 1995 Microwave and Guided Wave Letters 5.10 (Oct. 1995 [MGWL]): 351-353.

A novel Finite Difference Time Domain (FDTD) scheme is proposed for the analysis of waveguide components. The method consists of combining the conventional 3D with the lD-FDTD algorithm resulting from the time domain modal expansion in uniform waveguides. The new algorithm has been validated on a simple test example showing that the same accuracy can be obtained with a substantial improvement in the numerical efficiency.

❑ Return to main document.