Abstracts

Efficient Full-Wave Analysis of Stratified Planar Structures and Unbiased TW-FET's

M. Farina, G. Gerini and T. Rozzi. "Efficient Full-Wave Analysis of Stratified Planar Structures and Unbiased TW-FET's." 1995 Transactions on Microwave Theory and Techniques 43.6 (Jun. 1995 [T-MTT]): 1322-1329.

We have developed a rigorous full-wave analysis technique capable of characterizing quasiplanar traveling wave structures, constituted of multilayer dielectrics and conductors of finite thickness, also taking into account dielectric and conductor losses. We have studied boxed embedded microstrips and another complex passive structure, namely the T-gate TW-FET, devoting particular attention to the distribution of current inside the metallization. All structures considered were simulated by means of a desktop computer. We have tested our program by comparing our results with experimental data of embedded microstrips and employed it for the characterization of planar and T-type gates of the FET's without bias.

❑ Return to main document.