Abstracts

Extension of the lumped network (LN)-FDTD approach to the modelling of nonlinear elements

G. Emili, F. Alimenti, P. Mezzanotte, L. Roselli and R. Sorrentino. "Extension of the lumped network (LN)-FDTD approach to the modelling of nonlinear elements." 2000 MTT-S International Microwave Symposium Digest 00.1 (2000 Vol. I [MWSYM]): 383-386.

Recently a method has been proposed that allows general linear lumped networks (LN) to be incorporated within finite difference time domain (FDTD) simulators. In the present work this method is extended to arbitrary nonlinear lumped networks (NL/sup 2/N) and applied to packaged Schottky diodes. The latter are represented in only one FDTD grid cell. Simulated and measured results are in good agreement.

❑ Return to main document.