

Abstracts

Analysis of lumped element transistor structures using MRTD: the equivalent source method

R.L. Robertson and L.P.B. Katehi. "Analysis of lumped element transistor structures using MRTD: the equivalent source method." 2001 MTT-S International Microwave Symposium Digest 01.3 (2001 Vol. III [MWSYM]): 2015-2018 vol.3.

The Multiresolution Time Domain (MRTD) method is applied to Maxwell's equations and used to simulate lumped element transistor circuits. These lumped element circuits are expressed in terms of equivalent sources, or difference equations derived a priori to describe the behavior of the transistor. In this formulation, the transistor is modeled as a current source truncating the computation region. MRTD results are compared to those generated by LIBRA and good correlation is noted.

[Return to main document.](#)