Abstracts

A new global time domain electromagnetic simulator of microwave circuits including lumped elements based on finite element method

K. Guillouard, M.F. Wong, V.F. Hanna and J. Citerne. "A new global time domain electromagnetic simulator of microwave circuits including lumped elements based on finite element method." 1997 MTT-S International Microwave Symposium Digest 3. (1997 Vol. III [MWSYM]): 1239-1242.

This paper proposes an extension of the Finite Element Time Domain (FETD) method for the global electromagnetic (EM) analysis of complex inhomogeneous microwave distributed circuits, containing linear or non linear lumped elements. This technique combines Maxwell's equations and circuit equations, using directly SPICE software. Results are given for a capacitor, a resistor as well as a Schottky diode.

❑ Return to main document.