Abstracts

A New Global Finite Element Analysis of Microwave Circuits Including Lumped Elements (1996 Vol. I [MWSYM])

K. Guillouard, M.F. Wong, V.F. Hanna and J. Citerne. "A New Global Finite Element Analysis of Microwave Circuits Including Lumped Elements (1996 Vol. I [MWSYM])." 1996 MTT-S International Microwave Symposium Digest 96.1 (1996 Vol. I [MWSYM]): 355-358.

A new fullwave global analysis of complex inhomogeneous structures including passive or active, linear or non linear lumped elements is presented. Only one electromagnetic simulation of the distributed part, by a 3D finite element method using edge elements, is needed corresponding to the insertion of several lumped elements placed at the same position. Results for a resistor, a diode inserted in a microstrip circuit as well as a Gunn diode amplifier are presented and comparisons with measurements are given for an active structure.

❑ Return to main document.