Abstracts

Network equivalence of port discontinuity related to source plane in a deterministic 3-D method of moments

L. Zhu and K. Wu. "Network equivalence of port discontinuity related to source plane in a deterministic 3-D method of moments." 1998 Microwave and Guided Wave Letters 8.3 (Mar. 1998 [MGWL]): 130-132.

Port discontinuity in a deterministic three-dimensional (3-D) method of moments (MoM) algorithm using the impressed voltage excitation is accurately modeled in terms of its equivalent circuit network. This is done through the application of a newly developed scheme called the short-open calibration (SOC) technique. The resulting network equivalence can be explicitly formulated by the use of an analytical procedure. It is observed from our predicted results that the port discontinuity can be reasonably equivalent to a lumped shunt capacitance at low frequency while at high frequency it should be modeled as a dispersive circuit network.

❑ Return to main document.