

Numerical Simulation of a Virtual Matched Load for the Characterization of Planar Discontinuities

H. Ghali, M. Drissi, J. Citerne and V.F. Hanna. "Numerical Simulation of a Virtual Matched Load for the Characterization of Planar Discontinuities." 1992 MTT-S International Microwave Symposium Digest 92.2 (1992 Vol. II [MWSYM]): 1119-1122.

A mixed technique, based on the association of the integral equations solved by the method of moments (Galerkin) to the theory of loaded scatterers, is shown to be useful for simulating virtual matched loads for characterizing planar discontinuities. The theory of loaded scatterers is used to include the effects of either localized or distributed loads through which the matching can be achieved. Moreover, when using this technique for shielded discontinuities, the scattering parameters are obtained from the knowledge of only current or electric field maxima and hence, the errors associated with the accurate determination of the current or the electric field minimum evaluation encountered in other existing techniques are avoided. A good agreement is reported between experimental and theoretical results for some simple and multilayer discontinuities.

 [Return to main document.](#)