Abstracts

A Numerical TRL De-Embedding Technique for the Extraction of S-Parameters in a 2/sup 1/2/D Planar Electromagnetic Simulator

A numerical application of the TRL calibration for a planar discontinuity is proposed to be used in electromagnetic simulators in order to calculate its scattering matrix without the need of either defining the port characteristic impedance as in the slotted line numerical simulation or of normalizing with respect to a specified value of reference impedance as in other known de-embedding methods. The proposed technique is applied, in a 2/sup 1/2/D planar electromagnetic simulator using integral equations technique solved by the moment method, on a case study of a step in width coplanar waveguide discontinuity and we have demonstrated how many numerical problems encountered previously when using other techniques were eliminated.

❑ Return to main document.