

Application of MoM-GEC Method for Electromagnetic Study of Planar Microwave Structures: Shielding Application

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Abstract : In this paper, an electromagnetic analysis is presented for describing the influence of shielding in a rectangular waveguide. A hybridization based on the method of moments combined to the generalized equivalent circuit MoM-GEC is used to model the problem. This is validated by applying the MoM-GEC hybridization to investigate a diffraction structure. It consists of electromagnetic diffraction by an iris in a rectangular waveguide. Numerical results are shown and discussed and a comparison with FEM and Marcuvitz methods is achieved.

Keywords : method MoM-GEC, waveguide, shielding, equivalent circuit

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