Abstracts

Absorbing Boundary Conditions for the TLM Method

J.A. Morente, J.A. Porti and M. Khalladi. "Absorbing Boundary Conditions for the TLM Method." 1992 Transactions on Microwave Theory and Techniques 40.11 (Nov. 1992 [T-MTT]): 2095-2099.

The numerical boundary conditions when behavior of different absorbing applied to the transmission-line modelling method is presented. These conditions may be classified into three different groups according to the way they are derived. The first group is obtained by discretizing one-way analytical conditions derived for the analytical wave equation. The second group is a set of discrete conditions directly obtained for the discrete wave equation. The last group is based on appropriate reflection coefficients derived purely from transmissionline theory. Due to its different behavior, the numerical study is explicitly carried out for both two- and three-dimensional free-space scattering problems.

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