Abstracts

A Z-transform-based absorbing boundary conditions for 3-D TLM-SCN method

Zhenhai Shao, Wei Hong and Hongwei Wu. "A Z-transform-based absorbing boundary conditions for 3-D TLM-SCN method." 2002 Transactions on Microwave Theory and Techniques 50.1 (Jan. 2002, Part I [T-MTT] (Mini-Special Issue on 1999 International Microwave and Optoelectronics Conference (IMOC'99))): 222-225.

In this paper, an efficient absorbing boundary condition (ABC) constructed in the Z-transform domain [i.e., Z-transform-based absorbing boundary conditions (Z-ABCs)] for the three-dimensional symmetrical condensed-node transmission-line matrix method is presented. Numerical results indicate that the Z-ABCs show better performance than the conventional Higdon's ABC in suppressing instability caused by spurious modes.

❑ Return to main document.