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A Monolayer Passive Structure Analysis by WCIP method

Hicham MEGNAFI, Noureddine BOUKLI-HACENE, Henri BAUDRAND Nathalie RAVEU and Ikram ALLAM

Abstract :

This paper presents an efficient implementation of waves' concept based on the iterative method algorithm combined with the FFT-2D algorithm adapted to box modes, or Fast Modal Transform (FMT). The advantages of this method are simplicity and the no implication of basic functions and matrices inversion. As used in other calculation's methods, this work consists of a development of simulation software based on this method for simple layer planar circuits simulation. The simulations of a microstrip line and a low band filter are made. The obtained results have been analyzed and validated by comparison to results obtained by other researchers and by using a EM simulator.

Keywords :

Iterative method, microwave, concept of waves, S parameter, Filter planar.

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