Abstracts

Adaptive Frequency Sampling Algorithm for Fast and Accurate S-Parameter Modeling of General Planar Structures

T. Dhaene, J. Ureel, N. Fache and D. De Zutter. "Adaptive Frequency Sampling Algorithm for Fast and Accurate S-Parameter Modeling of General Planar Structures." 1995 MTT-S International Microwave Symposium Digest 95.3 (1995 Vol. III [MWSYM]): 1427-1430.

A new adaptive technique is proposed to represent the spectral response of general planar structures over some frequency range of interest with a minimal number of frequency samples. Rational fitting functions are used to model and interpolate the S-parameters obtained through electromagnetic simulation. The adaptive algorithm doesn't require any a priori knowledge of the dynamics of the S-parameters in order to select an appropriate sampling distribution. This greatly improves the transparent use of any electromagnetic simulator, Keywords: adaptive frequency sampling, fitting technique, electromagnetic simulation.

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