

Abstracts

A new global-analysis model for microwave circuits with lumped elements

Chi-Hsueh Wang, Huei Wang and Chun Hsiung Chen. "A new global-analysis model for microwave circuits with lumped elements." 2001 MTT-S International Microwave Symposium Digest 01.3 (2001 Vol. III [MWSYM]): 1937-1940 vol.3.

A new global full-wave analysis model by using the gap-current ports to analyze the microwave circuits with linear or nonlinear lumped elements is proposed. Based on this model, all electromagnetic effects due to the distributed parts of circuit structures can be easily characterized. In this study, the proposed model is applied to analyze and design a singly balanced diode mixer circuit using the slotline T-junction as a 180/spl deg/ hybrid.

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