Abstracts

Frequency-Domain Bivariate Generalized Power Series Analysis of Nonlinear Analog Circuits (Short Papers)

P.J. Lunsford, II, G.W. Rhyne and M.B. Steer. "Frequency-Domain Bivariate Generalized Power Series Analysis of Nonlinear Analog Circuits (Short Papers)." 1990 Transactions on Microwave Theory and Techniques 38.6 (Jun. 1990 [T-MTT]): 815-818.

Bivariate generalized power series analysis is introduced for the analysis and behavioral modeling of nonlinear analog circuits and systems. It can be used to model analog subsystems and is compatible with circuit simulation. Thus full circuits and behaviorally modeled analog subcircuits can be simulated together in an analog circuit/system simulator. The entire analysis is performed in the frequency domain, and arbitrary nonlinear circuits and any number of noncommensurable input frequencies can be handled. A diode ring demodulator is analyzed as an example.

❑ Return to main document.