Abstracts

Generalized Power Series Analysis of Intermodulation Distortion in a MESFET Amplifier: Simulation and Experiment (Dec. 1987 [T-MTT])

G.W. Rhyne and M.B. Steer. "Generalized Power Series Analysis of Intermodulation Distortion in a MESFET Amplifier: Simulation and Experiment (Dec. 1987 [T-MTT])." 1987 Transactions on Microwave Theory and Techniques 35.12 (Dec. 1987 [T-MTT] (1987 Symposium Issue)): 1248-1255.

The design of microwave integrated circuits requires accurate simulation tools capable of predicting a variety of nonlinear distortion effects, including gain compression and intermodulation distortion. This paper uses the recently developed generalized power series analysis to simulate a MESFET amplifier. The simulations are in agreement with experimental results for single-tone and two-tone inputs, thereby validating the analysis method. This analysis is suited to nonlinear microwave circuits having arbitrarily spaced input frequencies.

❑ Return to main document.