

Abstracts

A Fully Analytical AC Large-Signal Model of the GaAs MESFET for Nonlinear Network Analysis and Design

A. Madjar. "A Fully Analytical AC Large-Signal Model of the GaAs MESFET for Nonlinear Network Analysis and Design." 1988 *Transactions on Microwave Theory and Techniques* 36.1 (Jan. 1988 [T-MTT]): 61-67.

In recent years much attention has been focused on nonlinear microwave circuit analysis. Several research groups have published new ideas and new approaches to more efficient computational schemes. To be able to apply these methods it is essential to have an accurate and efficient large-signal model for the device. In previous work the author has developed such a model for the GaAs MESFET. To further increase computational speed and to permit use of the model by other workers, a fully analytical approximation of the model was developed and is presented here. The accuracy of the model is demonstrated, and it is presented in a form that can be easily used and implemented by the reader.

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