Abstracts

Linear and nonlinear FET modeling applying an electromagnetic and electrical hybrid software

E. Larique, S. Mons, D. Baillargeat, S. Verdeyme, M. Aubourg, R. Quere, P. Guillon, C. Zanchi and J. Sombrin. "Linear and nonlinear FET modeling applying an electromagnetic and electrical hybrid software." 1999 Transactions on Microwave Theory and Techniques 47.6 (Jun. 1999, Part II [T-MTT]): 915-918.

A new approach is presented in this paper to help the modeling of complex active microwave devices like field-effect transistors. This hybrid method couples an electromagnetic three-dimensional simulator to characterize the extrinsic part and a circuit software to introduce the contribution of the component intrinsic part. The interests of such approach are diverse and are discussed in this paper. Theoretical linear and nonlinear results are compared with measurements and show good agreements.

❑ Return to main document.