Abstracts

A New Nonlinear I(V) Model for FET Devices Including Breakdown Effects

J.P. Teyssier, J.P. Viaud and R. Quere. "A New Nonlinear I(V) Model for FET Devices Including Breakdown Effects." 1994 Microwave and Guided Wave Letters 4.4 (Apr. 1994 [MGWL]): 104-106.

The nonlinear FET I(V) behavior, including gate conduction and breakdown, has been investigated using a pulse measurement setup. An excessive current source has been observed in addition to the usual gate breakdown current. From these measurements, a nonlinear model including the conduction, breakdown, and excessive current phenomenon is proposed for the nonlinear simulation of high-power circuits. This I(V) model presents an improvement in terms of load line prediction and limits for the high-power nonlinear circuit design.

❑ Return to main document.