

Abstracts

Development and verification of a new non-linear MOSFET model (2002 Vol. I [MWSYM])

H. Romdane, E. Bergeault and B. Huyart. "Development and verification of a new non-linear MOSFET model (2002 Vol. I [MWSYM])." 2002 MTT-S International Microwave Symposium Digest 02.1 (2002 Vol. I [MWSYM]): 597-599 vol. 1.

A new non-linear model of Si MOSFET transistor based on a device characterization using DC and small-signal scattering parameter measurements is proposed. It is shown that interpolation of measured data and look up tables provide an extensive description of the extrinsic and intrinsic MOSFET non-linearities. Model verification is achieved by comparing simulations and on-wafer measurements of S parameters at a typical bias point.

[Return to main document.](#)