

An Improved MESFET Model for Prediction of Intermodulation Load-Pull Characterization

J.C. Pedro and J. Perez. "An Improved MESFET Model for Prediction of Intermodulation Load-Pull Characterization." 1992 MTT-S International Microwave Symposium Digest 92.2 (1992 Vol. II [MWSYM]): 825-828.

An accurate characterization of the nonlinear distortion caused by the $I_{ds}(V_{gs}, V_{ds})$ current in a MESFET, does not allow the common approach of splitting this nonlinear equivalent circuit element in two voltage dependent nonlinear current sources, $G_m(V_{gs})$ and $G_{ds}(V_{ds})$. By an improved laboratory characterization procedure, it was possible to show that the cross terms of the $I_{ds}(V_{gs}, V_{ds})$ Taylor Series expansion can give an important contribution to the prediction of MESFET's intermodulation load-pull behavior.

 [Return to main document.](#)