Abstracts

An Efficient Linear Statistical FET Model

M. Petzold, J. Purviance and C. Potratz. "An Efficient Linear Statistical FET Model." 1989 MTT-S International Microwave Symposium Digest 89.1 (1989 Vol. I [MWSYM]): 375-378.

The commonly used FET model is examined and found to be at best a difficult structure for modeling a FET's perfomance statistics. A simpler linear statistical model based on Principal Component Analysis is proposed which results in uncorrelated model parameters. An example using actual measured GaAs FET data uses just 13 uncorrelated random variables to model the FET's performance statistics from 1 to 11 GHz.

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