

Abstracts

Statistical Techniques for Objective Characterization of Microwave Device Statistical Data

M.D. Meehan and L. Campbell. "Statistical Techniques for Objective Characterization of Microwave Device Statistical Data." 1991 MTT-S International Microwave Symposium Digest 91.3 (1991 Vol. III [MWSYM]): 1209-1212.

A comprehensive treatment of statistical metrics for the characterization of microwave device statistical data is presented. The primary aim is to investigate the power of these tests in their ability to faithfully delineate between like and unlike Joint Probability Density Functions (JPDF). This paper shows that adequate techniques are available to solve this problem, and illustrates a novel application of these techniques by distinguishing the statistical difference between two GaAs FET data bases that have identical means, standard deviations, kurtosis, skewness and correlations. Finally, we verify our characterization approach by design centering a small-signal amplifier, both with and without the use of statistically characterized device data.

[Return to main document.](#)