Abstracts

Evaluation of Noise Parameter Extraction Methods

L. Escotte, R. Plana and J. Graffeuil. "Evaluation of Noise Parameter Extraction Methods." 1993 Transactions on Microwave Theory and Techniques 41.3 (Mar. 1993 [T-MTT]): 382-387.

The influence of the algorithm used for noise parameter fitting on the accuracy of the microwave noise parameter measurements is investigated. Five different commonly used algorithms are compared by statistical analysis including instrument accuracy specifications. Some of these algorithms are found to be more efficient in terms of available accuracy and computer-time. The best predicted available accuracies reported between 4 and 20 GHz for each noise parameter compare well with observed accuracies on noise parameter measurements performed with a dedicated test-set on a noise standard made of a passive two-port. The accuracy on minimum noise figure is found to be 0.1 dB maximum.

❑ Return to main document.