Abstracts

Wave Techniques for Noise Modeling and Measurement

S.W. Wedge and D.B. Rutledge. "Wave Techniques for Noise Modeling and Measurement." 1992 Transactions on Microwave Theory and Techniques 40.11 (Nov. 1992 [T-MTT]): 2004-2012.

The noise wave approach is applied to analysis, modeling, and measurement applications. Methods are presented for the calculation of component and network noise wave correlation matrices. Embedding calculations, relations to two-port figures-of-merit, and transformations to traditional representations are discussed. Simple expressions are derived for MESFET and HEMT noise wave parameters based on a linear equivalent circuit. A noise wave measurement technique is presented and experimentally compared with the conventional method.

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