Abstracts

Design of Microwave GaAs MESFET's for Broad-Band, Low-Noise Amplifier (Comments)

M.W. Pospieszalski and W. Wiatr. "Design of Microwave GaAs MESFET's for Broad-Band, Low-Noise Amplifier (Comments)." 1986 Transactions on Microwave Theory and Techniques 34.1 (Jan. 1986 [T-MTT]): 194-194.

In the above widely-referenced paper, the empirical formulas for four noise parameters of microwave GaAs FET’s are given. It was assumed that the four noise parameters could be expressed in terms of the equivalent circuit elements by simple formulas (2)-(5) of the subject paper. Four fitting factors in these formulas were determined from the measured values of the noise parameters and the equivalent circuit elements of sample GaAs MESFET’s given in Table II. It is the point of this letter to demonstrate that, in some cases, the measured noise parameters, as well as those determined from the semi-empirical formulas, may not represent the noise of any physical two-port.

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