

XXVI. NOISE IN ELECTRON DEVICES*

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SUMMARY

Our work on the circuit theory of noise performance limitations has reached a state at which it is reasonable to say that a phase has been completed. In perspective, this phase might be described as the achievement of a systematic circuit theory of signal-to-noise ratio and gain in linear noisy networks. The bulk of the work is contained in three papers (1, 2, 3), and a unified picture of these separate contributions is presented in a Technology Press Research Monograph (4).

While we have certainly not answered all of the questions which previously motivated our research in this general area of noise in electron devices, it seems that the line of attack covered by the aforementioned work is not fruitful in answering them. For this reason we believe that fresh ideas will be required to make additional progress in this area, and that the reporting of this topic should be suspended until new directions emerge.

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References

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