

Abstracts

Physics-based FET noise model applicable to millimeter-wave frequencies

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A physics-based FET noise model applicable to MM-wave frequencies is presented. The noise model is based on the short-circuit noise current derived from a 2-D noise equi-potential surface analysis. The model requires only one fitting parameter and includes the feedback effect of C_{gd} , so that it can be valid at frequencies close to f_{max} . Good agreement with measurement was found up to 100 GHz.

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