

# Abstracts

## Intrinsic noise currents in deep submicron MOSFETs

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Chih-Hung Chen, M.J. Deen, Yuhua Cheng and M. Matloubian. "Intrinsic noise currents in deep submicron MOSFETs." 2001 MTT-S International Microwave Symposium Digest 01.2 (2001 Vol. II [MWSYM]): 835-839 vol.2.

A systemic extraction method to obtain the induced gate noise ( $i_{g\parallel}$ ), channel thermal noise ( $i_{d\parallel}$ ) and their cross-correlation term ( $i_{gd\parallel}$ ) in submicron MOSFETs directly from scattering and RF noise measurements is presented and verified with measurements. The extracted noise currents versus frequency, bias condition and channel length for MOSFETs from a 0.18  $\mu$ m CMOS process are presented and discussed.

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