Abstracts

Improved Equivalent Circuit for Determination of MESFET and HEMT Parasitic Capacitances from "COLDFET" Measurements

P.M. White and R.M. Healy. "Improved Equivalent Circuit for Determination of MESFET and HEMT Parasitic Capacitances from "COLDFET" Measurements." 1993 Microwave and Guided Wave Letters 3.12 (Dec. 1993 [MGWL]): 453-454.

An improved equivalent circuit for MESFET and HEMT devices under zero drain bias pinched-off conditions is proposed. Parasitic gate and drain capacitances evaluated from low-frequency Y parameters using this circuit are approximately equal under conditions where equality would be expected from bond pad geometry considerations. In contrast, the previously used circuit considerably overestimates parasitic drain capacitance.

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