

Abstracts

Analytic sampling-circuit model

D.F. Williams and K.A. Remley. "Analytic sampling-circuit model." 2001 Transactions on Microwave Theory and Techniques 49.6 (Jun. 2001, Part I [T-MTT]): 1013-1019.

We develop analytic expressions for the impulse response and kickout pulses of a simple sampling circuit that incorporate the nonlinear junction capacitance of the sampling diode. We examine the effects of both the time-varying junction capacitance and conductance on the impulse response and kickout pulses, and discuss their impact on the accuracy of the nose-to-nose calibration technique.

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