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"Very small duty cycles for pulsed time domain transistor characterization"

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Abstract – This paper deals with an innovative approach for pulsed measurements, particularly suited for RF time domain transistor characterization. This approach avoids the loss of dynamic range induced by classical methods when the duty cycle decreases. The application of this principle with a LSNA is shown; an additional board has been added into the LSNA to manage all the necessary triggers and clocks. Results are shown with a HEMT AlGaN/GaN, duty cycles up to 0.0001 are demonstrated with 1µs pulse durations.