# Abstracts

## Time domain modeling of PIN control and limiter diodes

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A time domain model for the microwave and RF PIN switching diode is presented. The model is suitable for use in such time domain simulators as SPICE and simulates the important I-region charge storage phenomenon and its effect on the PIN diode behaviour in active circuits such as switches, attenuators and power limiters. For a SPST switch, the variation in PIN diode impedance is shown to affect the insertion loss in the switch. For microwave power limiters, spike leakage variation versus frequency for different RF voltages is also presented, showing the reduction in power limiting with increasing frequency for a given PIN diode.

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