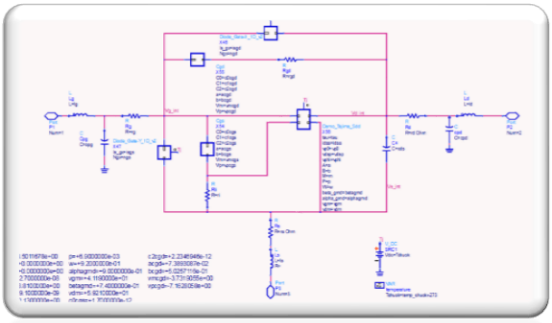
AMCAD Engineering
Advanced Modeling for Computer-Aided Design



GAN HEMT Model for ADS

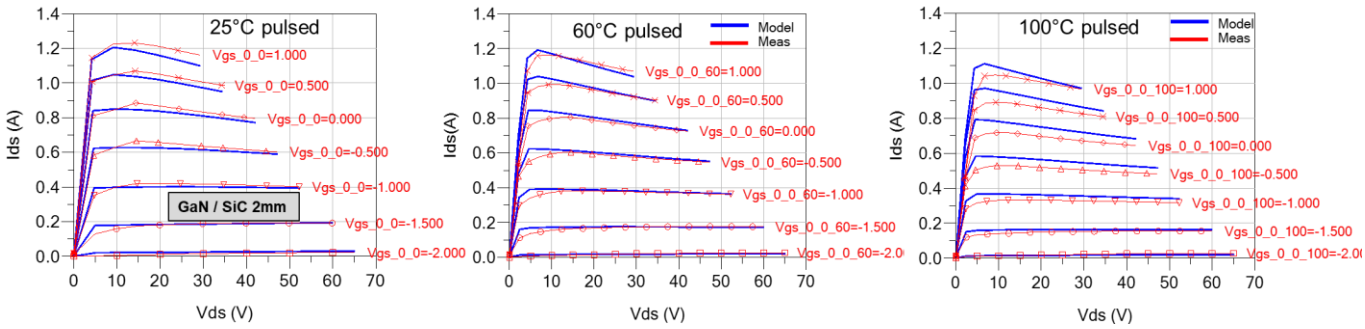
Modeling Service by AMCAD Engineering

In addition to turnkey modeling tools, AMCAD engineering offers transistor modeling services for the design of RF & Microwave circuits with **Keysight Technologies' ADS software.**

These models are the result of a multi-year research and development activity. **AMCAD is the leader in pulsed IV measurements** for quasi-isothermal transistor characterization.

This unique measurement technique makes it possible to highlight phenomena that are **not visible from other characterization techniques**. It allows components to be tested in high-power operating areas, without the risk of degrading or destroying the devices under test because of the self-heating.

This additional information is used for the model extraction, which as a result, makes it more reliable and more accurate than the other models. The increased accuracy of these models **shorten and secure the design flow** of RF and Microwave circuits.

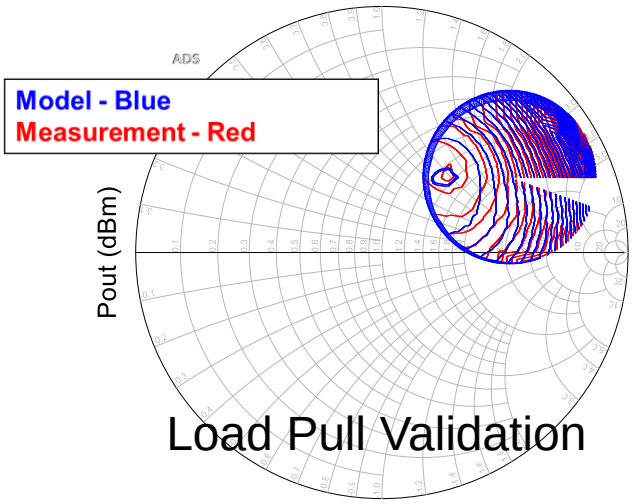


Our models take into account static and dynamic self-heating phenomena.

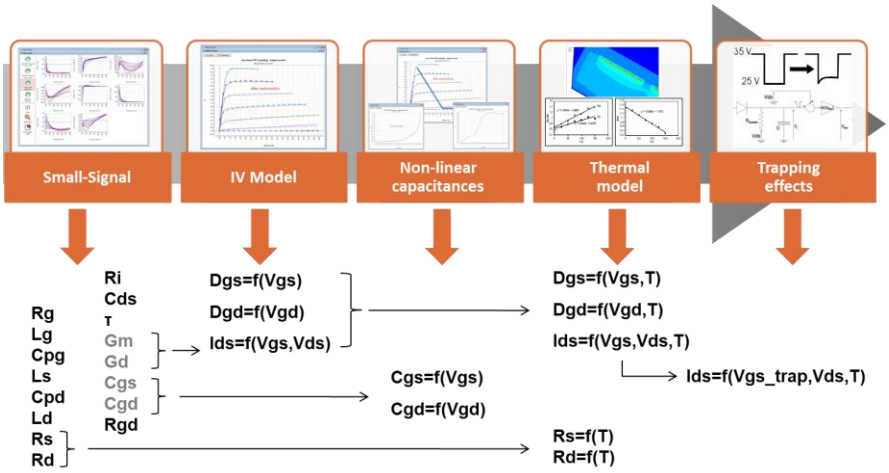
For GaN transistor technology, the AMCAD model takes into account the trapping effects (gate and drain lag), making them the most accurate commercial models on the market.

Extracted from pulsed IV measurements and pulsed S parameters, they are validated by load pull measurements for different powers, load, and frequency conditions.

To the contrary of compact models based on Artificial Neural Network models, these models are derived from a comprehensive modeling process, and are thus **modifiable and adjustable on demand**. The modeling process becomes then very time effective.



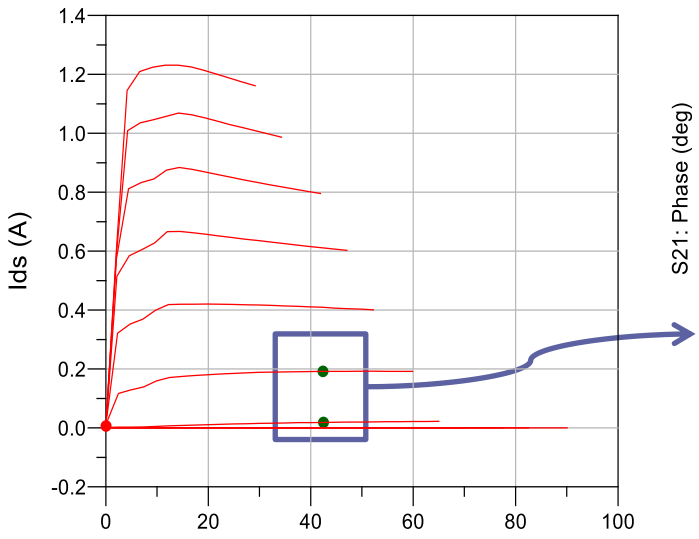
Load Pull Validation

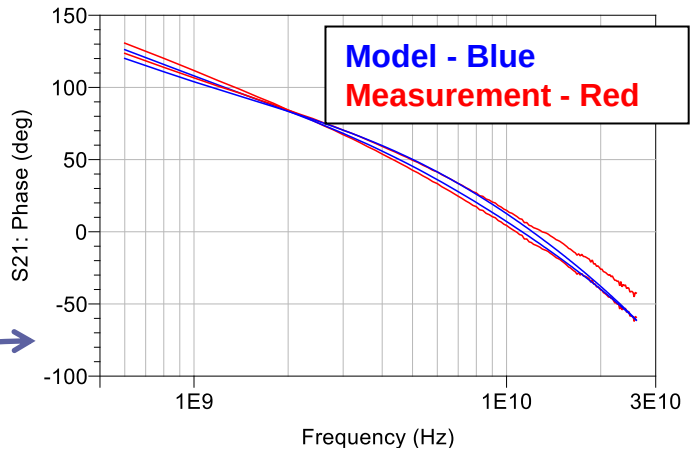


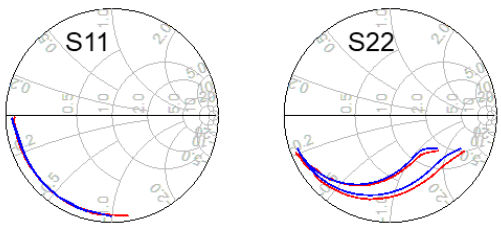
Thanks to a robust and proven modeling methodology, the simulations can be launched for :

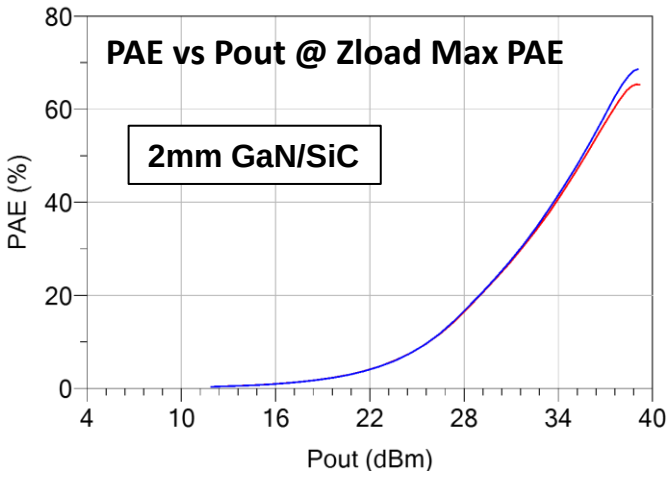
- Different temperatures
- Different bias points
- Different frequencies
- Different loads

A comprehensive modeling flow using IVCAD measurement and modeling platform









For more information on AMCAD' Modeling Services:

Visit www.amcad-engineering.com
Email : contact@amcad-engineering.com

ADS demo model available on demand !!