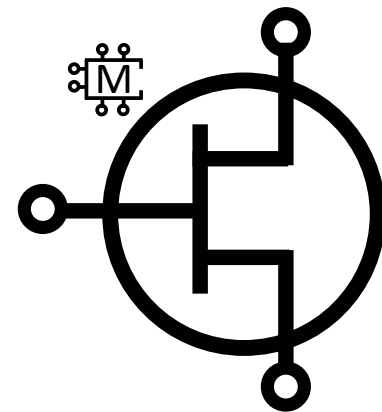
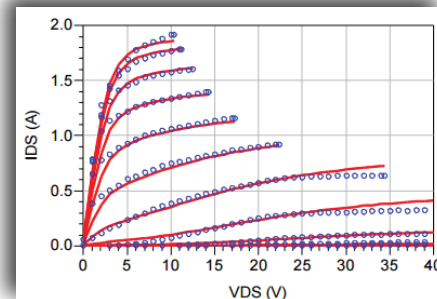


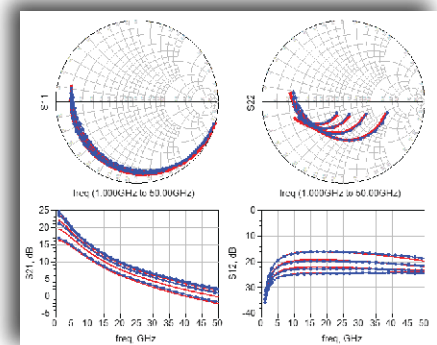
Modelithics' non-linear GaN HEMT modeling service brings the trusted measurement and proven modeling expertise of Modelithics to the GaN technology area, where high accuracy, scalability and advanced model features are integral to the design process when using these devices. Every aspect of the modeling process is handled by Modelithics: From the precision characterization of the device, to the accurate modeling using Modelithics' detailed processes and various topologies, to the packaging of the model and formatting for multiple popular EDA software tools.



I-V



Bias Dependent S-Parameters



Non-Linear GaN Transistor Model Parameters

Measurement Capabilities

- MMIC and package devices
- S-Parameters: 30 kHz to 170 GHz
- High Power Pulsed I-V to 30 A
- Measurements over temp (-55 - +200C)
- Non-linear with Load Pull (0.2-50 GHz)
- On-wafer and on-board testing
- Impedance: ESR, CV, Q to 3 GHz
- X-Parameters* to 67 GHz
- Pulsed-bias S-parameters
- Noise Parameters to 50 GHz¹

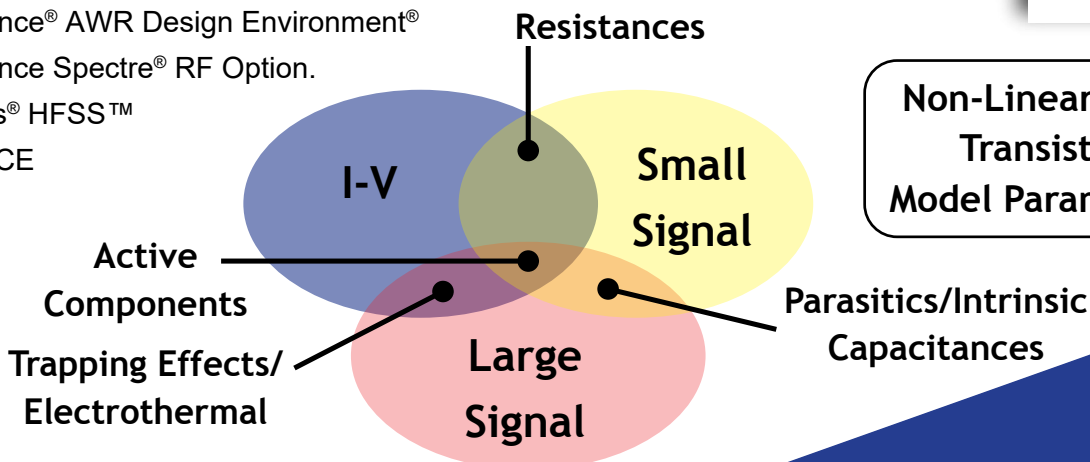
¹>50 GHz noise/non-linear testing available with custom setups

Model Features Offered

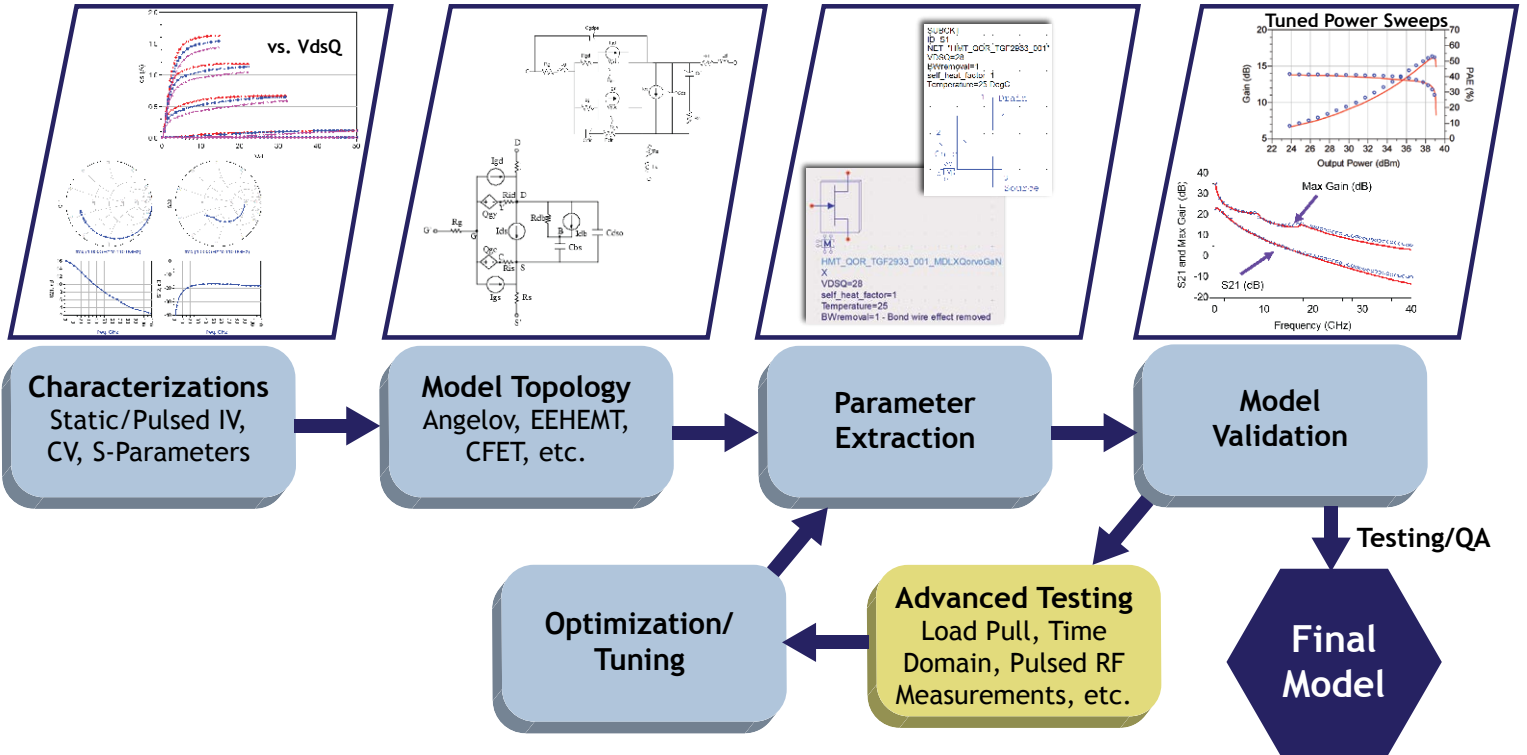
- Accurate small-signal performance
- Accurate large signal model
- Intrinsic I-V for waveform analysis
- Quiescent bias to capture trapping
- Low & high frequency noise behavior
- Self heat factor/electrothermal model
- Bias dependent
- Temperature dependent
- Bondwire removal parameter
- Detailed model datasheet
- Packaged and die GaN devices
- Empirical or Physics-Based advanced models

Simulator Compatibility

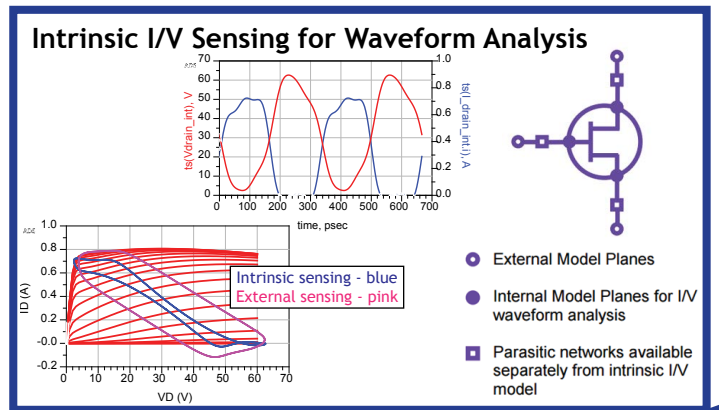
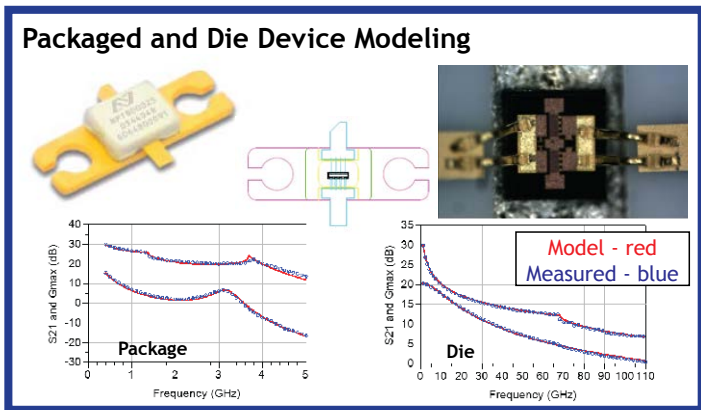
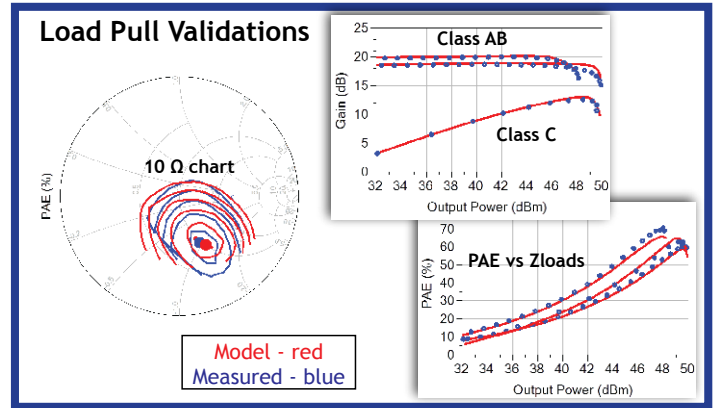
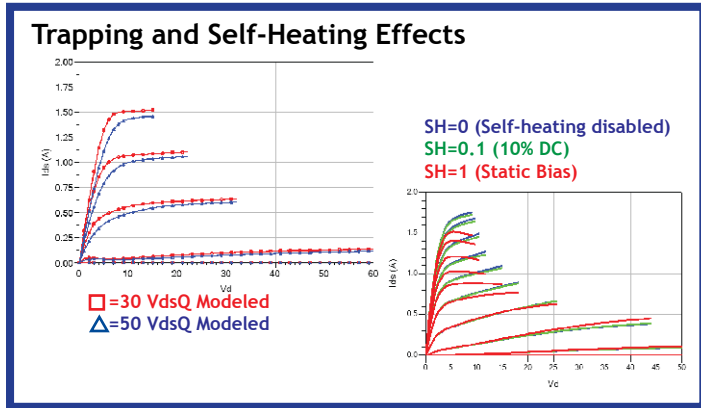
- Keysight PathWave Advanced Design System (ADS) and PathWave RF Synthesis (Genesys)
- Cadence® AWR Design Environment®
- Cadence Spectre® RF Option.
- Ansys® HFSS™
- PSPICE



Non-Linear Transistor Modeling Process



Modelithics GaN Modeling Features



To request a no obligation quote, please visit:
www.Modelithics.com/Requests/RFQ
 For more information on Modelithics' GaN Modeling Services,
 email Sales@Modelithics.com.