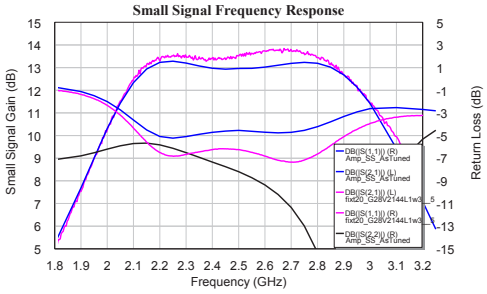
Large Signal Models for GaN-based HEMTs

Available for Microwave Office

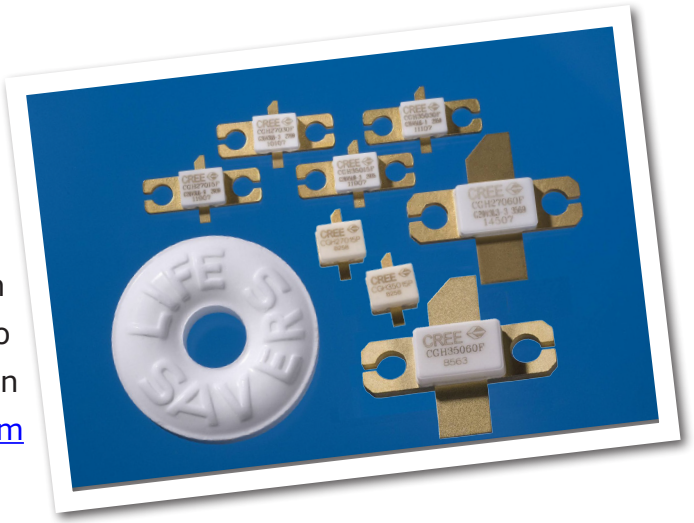


Example of Simulated vs Measured Results for CGH27060F-TB Demonstration Amplifier

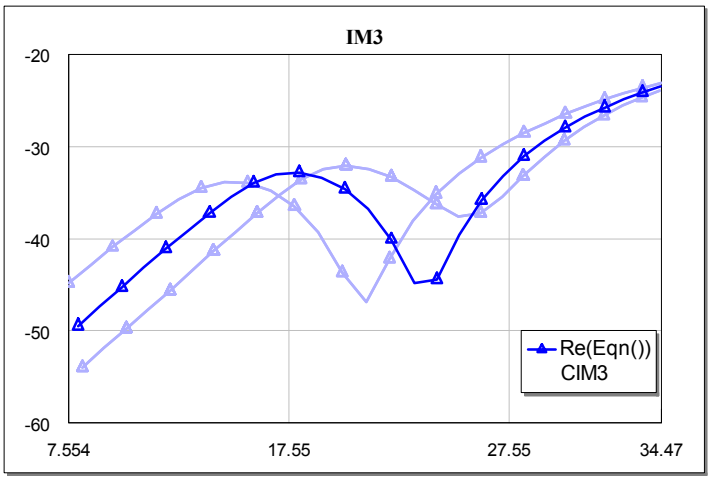
Enable accurate simulation of parameters, such as

- I-V Curves and Dynamic Load Lines
- S-Parameters
- Gain Compression
- Source and Load Pull Contours
- Drain Efficiency
- Two-tone IM3, IM5 and IM7
- Prediction of linearity "sweet spots"
- Channel temperatures automatically calculated and effects on DC and RF parameters taken into account

If you are interested in obtaining these models, simply contact Cree at WirelessSales@cree.com to request free access. Cree will send you a Device Model Evaluation Agreement (DMEA). Complete the DMEA form, including authorized signature, and return it to WirelessSales@cree.com. It can also be faxed to +1.919.869.CREE (+1.919.869.2733). Cree will then enable access to the RF Portal, at https://portal.cree.com for qualified customers.



"The speed and ease of use of Microwave Office together with the exceptional passive component and transistor models allows us to realize first pass design success on the demonstration amplifiers and modules we provide to our customers," said Simon Wood, RF Product Development Manager at Cree.



Example of Two-Tone IM3 as a function of average P_{OUT} and quiescent drain current in Class A/B mode

About Cree Inc.

Cree is a market-leading innovator of semiconductor solutions for wireless and power applications, lighting-class LEDs, and LED lighting solutions. Cree's product families include power-switching devices and radio-frequency/wireless devices, blue and green LED chips, high-brightness LEDs, lighting-class power LEDs, and recessed LED down lights. Cree solutions are driving improvements in applications such as variable-speed motors, wireless communications, general illumination, backlighting and electronic signs and signals.

Cree drives its increased performance technology into multiple applications, including exciting alternatives in brighter and more-tunable light for general illumination, backlighting for more-vivid displays, optimized power management for high-current, switch-mode power supplies and variable-speed motors, and more-effective wireless infrastructure for data and voice communications. Cree customers range from innovative lighting-fixture makers to defense-related federal agencies.

Durham, NC campus

A publicly traded company founded in 1987, Cree now employs more than 1,500 people at its Durham, North Carolina manufacturing facility and headquarters. Cree has additional manufacturing locations in North Carolina and Asia and additional offices in California, Europe and Asia. All Cree-owned manufacturing facilities are ISO/TS 16949 certified.

Contact

For inquiries and sample requests, please contact the Cree RF Components team at: +1-919-313-5300 or rfsales@cree.com

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