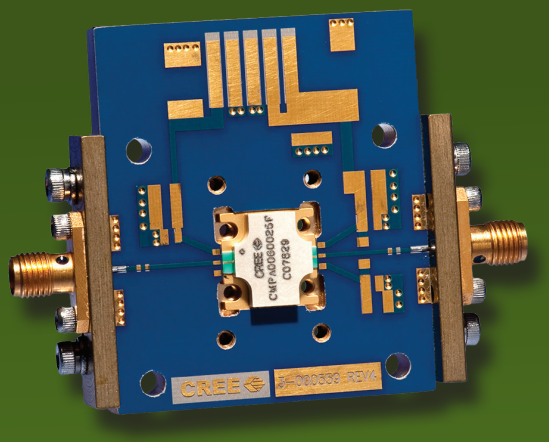
BROADBAND, HIGH POWER PRODUCTS

GaN HEMT Packaged Transistors, GaN HEMT Die, MMICs, & Switches for Extremely Wide Band Applications

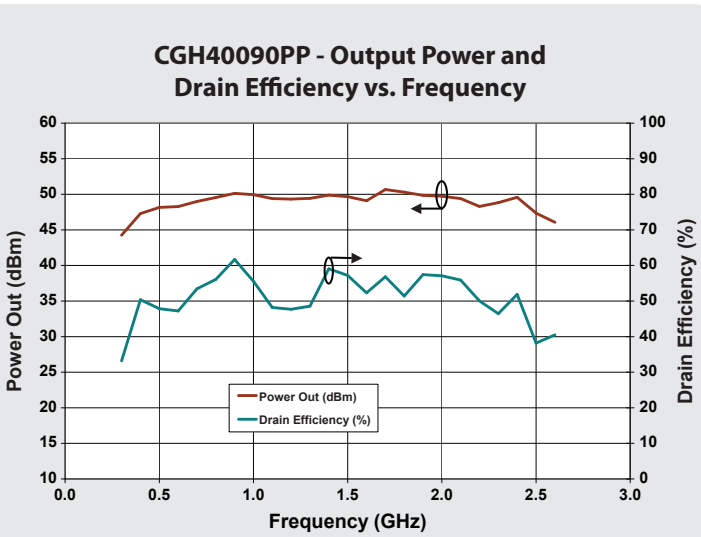


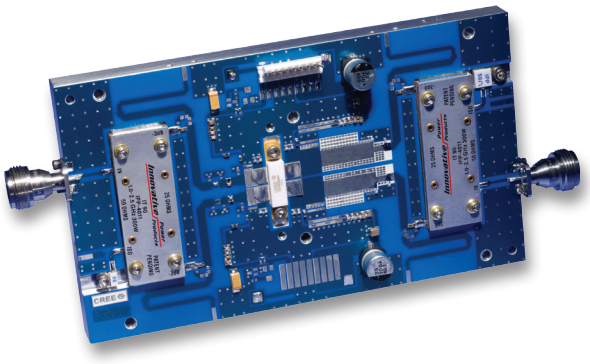
GaN HEMT devices are ideal for ultra broadband amplifier applications. The intrinsic properties of high power density, low parasitic, and high F_T allow for multi-octave to instantaneous bandwidth amplifiers. This family of products consists of packaged, unmatched discrete transistors from output powers from 6 W to 180 W (CW) at 28 V and packaged 50-ohm MMIC amplifiers suitable from DC-6 GHz applications operating at 28 V or 50 V. This portfolio also includes bare discrete die and bare MMIC die designed for hybrid amplifiers and multi-function transmit/receive modules.

GaN SELECTOR GUIDE

Output Power	Operating Frequency	Bare Die	Transistor	Broadband Reference Design	GaN MMIC
6 W	DC - 6.0 GHz	CGH60008D	CGH40006P / S	1.0 - 6.0 GHz	CMPA00600002
10 W	DC - 6.0 GHz	CGH60015D	CGH40010F / P	-	-
25 W	DC - 6.0 GHz	CGH60030D	CGH40025F / P	-	CMPA2560025 CMPA0060025
35 W	DC - 4.0 GHz	-	CGH40035F	-	-
45 W	DC - 4.0 GHz	CGH60060D	CGH40045F	-	-
90 W	DC - 4.0 GHz	-	CGH40090PP	0.5 - 2.5 GHz	-
120 W	DC - 2.5 GHz	CGH60120D	CGH40120F	-	-
180 W	DC - 2.5 GHz	-	CGH40180PP	-	-

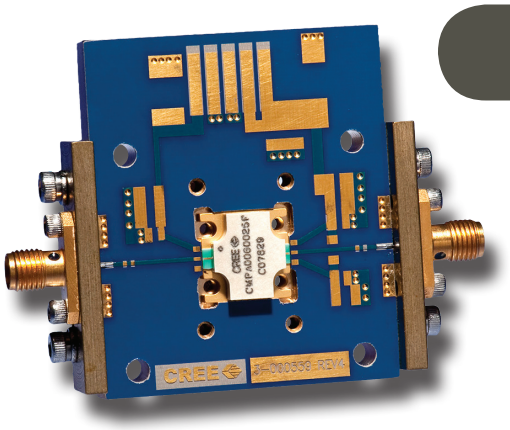
TYPICAL BROADBAND PERFORMANCE FOR 90 W DISCRETE GaN HEMT



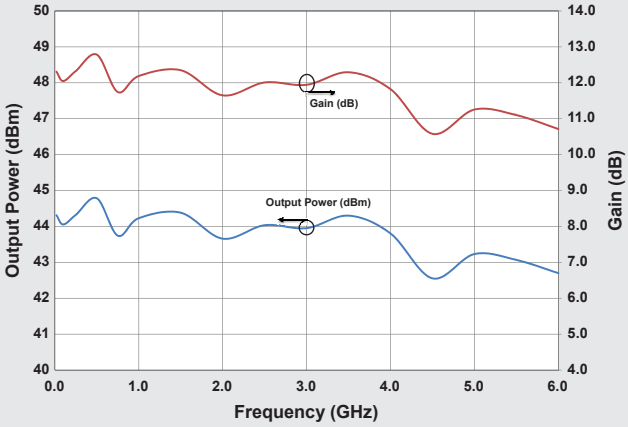


55% Average Efficiency from 0.5 - 2.5 GHz at 90 W!

TYPICAL BROADBAND PERFORMANCE FOR 25W GaN MMIC



The footprint is 0.5 inch, square!

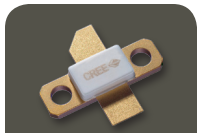


Type: 440117
Size: 0.38″ x 1.34″

Type: 440193
Size: 0.23″ x 0.80″

Type: 440166
Size: 0.16″ x 0.55″

Type: 440162
Size: 0.38″ x 0.80″



Type: 440095
Size: 0.23″ x 0.80″

Type: 440196
Size: 0.16″ x 0.20″

Type: 440204
Size: 3 mm x 3 mm

Large Signal Models Available

Cree, Inc.
3026 East Cornwallis Road
Research Triangle Park, North Carolina 27709
USA Tel: +1.919.313.5300
Fax: +1.919.869.CREE
Fax: +1.919.869.2733
www.cree.com/wireless