



RFHIC's OptiGaN Transistor Lineup

Optimal Cost & Performance



rfhic.com

 Visit us on LinkedIn

Copyright 2023. RFHIC Corporation All rights reserved.



About RFHIC

Pioneers in GaN SiC for Telecom Applications

RFHIC is a leading pioneer in designing and manufacturing gallium-nitride (GaN) on silicon-carbide (SiC) RF & MW components for wireless infrastructure applications.



OptiGaN™

Optimal Cost & Performance


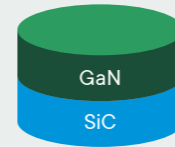
Experience the power of GaN SiC with RFHIC's OptiGaN Line Up

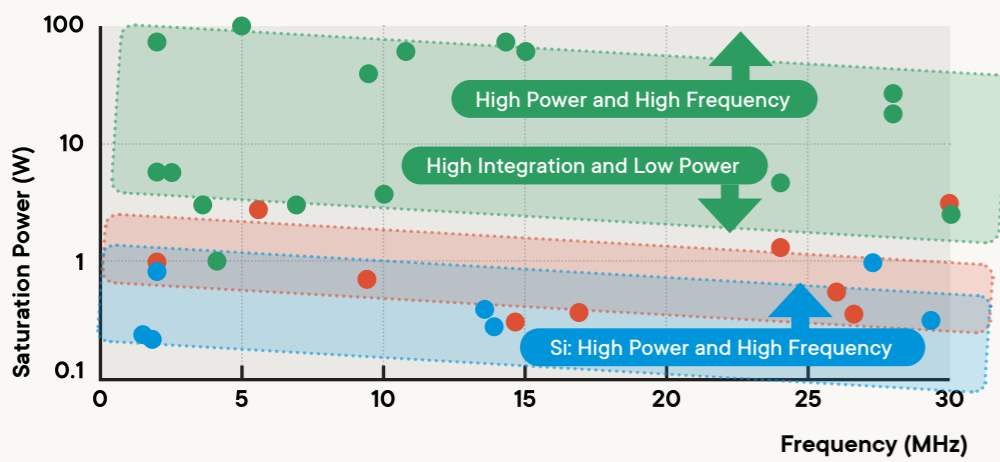
RFHIC introduces the OptiGaN transistor line, expertly crafted to deliver high performance at a budget-conscious price. Specifically designed for 4G, 4G LTE, and Open RAN applications. OptiGaN transistors are an ideal choice for users seeking to explore the advanced capabilities of GaN technology without stretching their budget. Discover your ideal wireless infrastructure solution with RFHIC's OptiGaN transistors, where affordability meets high-quality performance.

Benefits of GaN SiC Technology

Select the right transistors to make the smart choice for your 4G, 4G LTE, and Open RAN needs. Experience the boost in power, efficiency, and bandwidth with RFHIC's cutting edge GaN SiC technology, outperforming traditional solutions in 4G and 4G LTE applications.

Unlike other transistor technologies, GaN has unique characteristics that make it an ideal candidate for designing RF power amplifiers for cellular base stations for 4G, 4G LTE, and Open RAN applications.

	Si (LDMOS)	GaN on SiC
Material	 LDMOS	 GaN SiC
Size	8" wafer	4" wafer
Frequency	~ 3.5GHz	~ 40GHz
Bandwidth	200MHz	400MHz
Thermal Conductivity	70W/mk	350W/mk



● GaAs ● GaN ● CMOS, SiGe



Compact size thus reducing system size



Excellent thermal stability thus reducing OPEX costs



High power density and enhanced PAE

Part Number	Min Freq. (MHz)	Max Freq. (MHz)	Saturation Power (W)	Average Power (W)	Power Gain (dB)	Drain Efficiency (%)	VDC (V)
H004	DC	6000	28	6.3	18.7	32	48
H012C12D	758	821	440	79	17.5	56	48
H027C11A	758	960	630	107	17	57	48
H009C12A	1800	2200	398	79	14.7	52	48
H017	1800	2700	28.2	2	17.9	30	48
H014C11A	1800	2700	398	71	13	49	48
H016C12A	1805	1880	320	50	13.9	56	48
H009C11A	1805	1880	385	63	15.1	54	48
H020C11D	1805	1880	468	79	14.6	54	48
H006C11D	1805	1880	220	45	15.8	54	48
H016C11A	1805	2200	316	44	15.4	50	48
H001C11A	1880	2025	195	32	16.9	48	48
H005C11D	1880	2025	170	30	17	48	48
H020C12D	1930	2000	398	79	14.4	47	48
H020C13D	2110	2170	468	79	14.7	54	48
H007C11A	2300	2400	240	40	15.3	55	48
H108C11A	2496	2690	316	40	14.5	50	48
H018C11A	2520	2630	316	40	14.4	50	48
H002C11A	2580	2630	195	32	14.4	53	48
H029C11A	2620	2690	310	54	14.1	50	48
H028P1	2620	2690	33.1	3.2	18.6	23	48
H030C11D	2620	2690	398	79	11.9	47	48
H032C11A	3400	3600	288	50	10.2	44	48
H025C11A	3400	3800	302	45	11.4	45	48
H008C11A	3400	3800	174	26	14.1	44	48
H019	3400	3800	15.8	0.8	18.2	14.5	48
H031	3400	3800	56.2	10	14.2	46	48
H024	4500	4950	28	5	14	43	48

* Sample EVB board can be provided upon request.

