

RF Communication Products

GaN HEMT Transistors for Frequency-Agile, Software-Defined Radios, C-OFDM Data-links and Satcom Applications



Wolfspeed's GaN HEMT devices are ideally suited for a host of communications applications. They are perfect for applications seeking to improve bandwidth, efficiency, frequency of operation, or for transmitters challenged to reduce size and weight. These features enable significant savings on operating expenses.



BENEFITS

High reliability Higher efficiency Reduction of heat-sink requirements SiC substrate provides the best thermal performance Highly correctable with Digital Pre-Distortion

FEATURES

GaN-on-SiC technology Wideband performance High power density High-frequency operation High breakdown voltage



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PRODUCT SELECTOR PORTFOLIO - PACKAGED (DC - 3.8 GHz)

Output Power	DC - 2 GHz		1.8 - 2.3 GHz		2.3 - 2.7 GHz		2.7 - 3.8 GHz	
> 6 W	28V	40V	28V	40V	28V	40V	28V	40V
-0 //	CGH40006S	CGHV1F006S	CGH40006S	CGHV1F006S	CGH40006S	CGHV1F006S	CGH40006S	CGHV1F006S
>15 W	28V	50V	28V	50V	28V	50V	28V	50V
	CGH27015F/P	CGHV27015S	CGH27015F/P	CGHV27015S	CGH27015F/P	CGHV27015S	CGH35015F/P	CGHV27015S
	28V	50V	28V	50V	28V	50V	28V	50V
> 30 W	CGH27030F/P	CGHV40030 CGHV27030S CGHV1F025S	CGH27030F/P	CGHV40030 CGHV27030S CGHV1F025S	CGH27030F/P	CGHV40030 CGHV27030S CGHV1F025S	CGH35030F/P	CGHV40030 CGHV27030S CGHV1F025S
	28 V	50 V	28 V	50 V	28 V	50 V	28 V	50 V
>60 W	CGH27060F CG2H30070F	CGHV27060MP	CGH27060F CG2H30070F	CGHV27060MP	CGH27060F CG2H30070F	CGHV27060MP	CGH35060F	CGHV35060MP
>100 W	CGHV40100F/P		CGHV22100F/P, CGHV40100F/P		CGHV27100F/P, CGHV40100F/P			
> 200 W	CGHV40200PP		CGHV22200F/P		CGHV27200F/P			
> 240 W	-		CGH21240F		-			

PRODUCT SELECTOR PORTFOLIO - PACKAGED (4.4 - 14.5 GHz)

Output Power	4.4 - 5.0 GHz		4.9 - 5.8 GHz		5.8 - 7.2 GHz		7.9 - 8.4 GHz	13.75 - 14.5 GHz	
> 6 W	28 V	40 V	28 V	40 V	- CGHV1F006S		CGHV1F006S	CGHV1F006S	
	CGH40006S	CGHV1F006S	CGH40006S	CGHV1F006S			CGHVIF0003		
>15 W	28V	50V	28V	50V					
	CGH55015F1/P1	CGHV27015S	CGH55015F1/P1	CGHV27015S	-		-		
> 30 W	28V	50V	28V	50V	28V	40V		28V	40V
	CGH55030F1/P1	CGHV40030 CGHV27030S CGHV1F025S	CGH55030F1/P1	CGHV40030 CGHV27030S CGHV1F025S	CMPA5585025F CMPA5585030F	CGHV1F025S	CGHV1F025S	CMPA1D1E025F	CGHV1F025S
> 50 W			-		-		CGHV96050F1		
> 70 W	CGHV59070F/P		CGHV59070F/P		-		-		-
>100 W	CGHV5	60200F							

PRODUCT SELECTOR PORTFOLIO - BARE DIE

Output Power	L-Band	S-Band	C-Band	X-Band	Ku-Band	Device Types
>6W	CGH60008D CGHV1J006D	CGH60008D CGHV1J006D	CGH60008D CGHV1J006D	CGHV1J006D	CGHV1J006D	GaN HEMTs
>10 W	CGH60015D	CGH60015D	CGH60015D			GaN HEMTs
> 25 W	CGH60030D, CG2H80030D CGHV60040D CGHV1J025D	CGH60030D, CG2H80030D CGHV60040D CGHV1J025D	CGH60030D, CG2H80030D CGHV60040D CGHV1J025D CMPA5585030D	CGHV1J025D CMPA801D025D CMPA601C025D	CGHV1J025D CMPA1D1E030D	GaN HEMTs & MMICs
> 60 W	CGH60060D, CG2H80060D CGHV1J070D CGHV60075D	CGH60060D, CG2H80060D CGHV1J070D CGHV60075D CMPA2735075D	CGH60060D, CG2H80060D CGHV1J070D CGHV60075D	CGHV1J070D	CMPA1C1D060D	GaN HEMTs & MMICs
> 120 W	CGH60120D CGHV60170D	CGH60120D CGHV60170D	-	-	-	GaN HEMTs
> 300 W	CGHV40320D	CGHV40320D				GaN HEMTs

Powering More. Consuming Less.