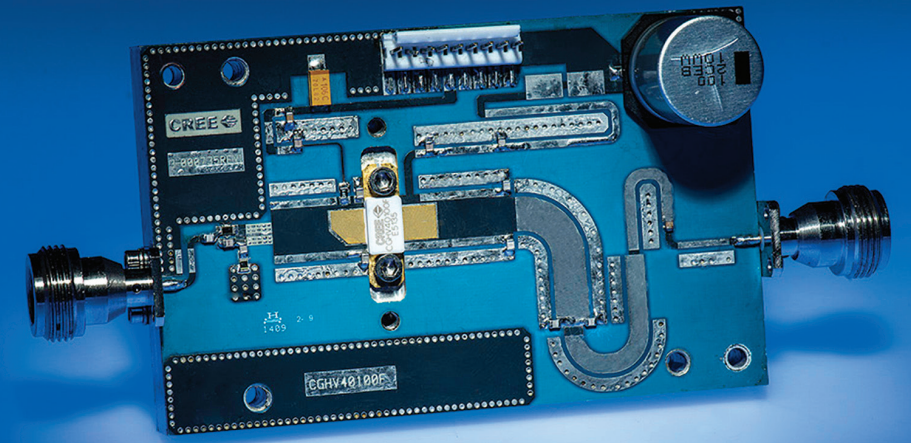




Aerospace and Defense Evaluation Fixtures

We offer a variety of RF solutions, from discrete bare die products, to unmatched packaged transistors, to input matched packaged transistors, all the way to the easiest to implement – 50-ohm matched transistors and MMICs. In this guide, we focus this list of application circuits on just the unmatched packaged transistor category or product type. Fully matched 50-ohm solutions are not in this guide, but are listed in the full product selector guide and on our website.





MilCom

Operational needs switch instantly from voice to video for SatCom, Radar, and back, and for each of these assets, Wolfspeed's industry-leading RF devices serve as a force multiplier.

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for other transistor package styles
CGH40006P	6	2.0-6.0 GHz	28 V	GaN	EW/MilCom	CGH40006P-AMP	-
CGH40006S	6	2.0-6.0 GHz	28 V	GaN	EW/MilCom	CGH40006S-AMP1	-
CGHV40050F/P	50	0.8-2.0 GHz	50 V	GaN	MilCom	CGHV40050F-AMP	-
CGHV27060MP	60	0.8 - 2.7 GHz	50 V	GaN	MilCom	CGHV27060MP-AMP3	
CGHV27060MP	60	0.1 - 1.0 GHz	45 V	GaN	MilCom	CGHV27060MP-AMP4	
CG2H30070F	70	0.5-3.0 GHz	28 V	GaN	MilCom	CG2H30070F-AMP1	-
CG2H30070F	140	0.5-3.0 GHz	28 V	GaN	MilCom	CG2H30070F-AMP2	-
CGH40090PP	90	0.5-2.5 GHz	28 V	GaN	MilCom	CGH40090PP-AMP	-
CGHV40100F/P	100	0.5-2.5 GHz	50 V	GaN	MilCom	CGHV40100F-AMP	CGHV40100P-AMP
CGHV40100F/P	100	0.1-1.0 GHz	50 V	GaN	MilCom	CGHV40100F-AMP1	-
CGHV40200PP	200	1.35-1.85 GHz	50 V	GaN	Datalink	CGHV40200PP-AMP1	-
PTVA042502FC	250	0.47-0.86 GHz	50 V	LDMOS	DVB-T	LTN/PTVA042502FC V1	-
PTVA047002EV	700	0.47-0.86 GHz	50 V	LDMOS	DVB-T	LTN/PTVA047002EV V1	-
PTVA104501EH	450	0.96-1.215 GHz	50 V	LDMOS	Avionics	LTN/PTVA104501EH V1	-
CMPA0527005F	5	0.5 - 2.7 GHz	50 V	GaN	MilCom	CMPA0527005F-AMP1	
CGHV40180F	150	0.02 - 0.52 GHz	50 V	GaN	MilCom	CGHV40180F-AMP2	
CGHV40180F	150	0.22 - 1.0 GHz	50 V	GaN	MilCom	CGHV40180F-AMP1	
CGHV40180F	180	0.96 - 1.22 GHz	50 V	GaN	TACAN	CGHV40180F-AMP3	
CGHV40180F	180	0.6 - 0.8 GHz	50 V	GaN	MilCom	CGHV40180F-AMP4	
CGHV40180P	350	0.2 - 0.52	50 V	GaN	MilCom	CGHV40180P-AMP5	2xCGHV40180P design
CG2H40010F	20	0.5 - 3.0 GHz	28 V	GaN	MilCom	CG2H40010F-AMP1	2xCG2H40010 design
CGHV40100F	100	1.35 - 2.11 GHz	50 V	GaN	MilCom	CGHV40100F-AMP3	
CMPA2060035F	50	2.0 - 6.0 GHz	32 V	GaN	EW/MilCom	CMPA2060035F-AMP1	2xCMPA2060035F
GTVA104001FA	400	0.96 - 1.22 GHz	50 V	GaN	TACAN	LTN/GTVA104001FA-V1	
GTVA107001FC	700	0.96 - 1.22 GHz	50 V	GaN	TACAN	LTN/GTVA107001FC V1	



MilCom

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for other transistor package styles
CG2H40120F	100	0.96 - 1.22 GHz	24 V	GaN	TACAN	CG2H40120F-AMP1	
PTVA047002EV	500	0.40 - 0.45 GHz	50 V	LDMOS	Comms	PTVA047002EV-AMP1	

General Purpose

Narrowband or broadband, we cover them all. General purpose devices are versatile for use in linear, pulsed and CW power amplifier applications.

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for other transistor package styles
CGH40180PP	180	1.1-1.3 GHz	28 V	GaN	General Purpose	CGH40180PP-AMP	-
CGHV40180F/P	180	0.8-1.0 GHz	50 V	GaN	General Purpose	CGHV40180F-AMP	-
CGHV40200PP	200	1.35-1.85 GHz	50 V	GaN	General Purpose	CGHV40200PP-AMP1	-

Radar

Radar is ubiquitous, and so is Wolfspeed. Wolfspeed RF products deliver wider bandwidth, far greater efficiency and the higher capacities needed to execute design and engineering improvements. We offer devices for UHF, L,S,C,X, and Ku band radar applications.

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for other transistor package styles
PTVA120251EA	25	1.2-1.4 GHz	50 V	LDMOS	L-Band Radar	LTN/PTVA120251EA V2	-
CGHV27030S	30	1.2-1.4 GHz	50 V	GaN	L-Band Radar	CGHV27030S-AMP5	-
CGHV40030F/P	30	0.95-1.4 GHz	50 V	GaN	L-Band Radar	CGHV40030F-AMP	-
PTVA120501EA	50	1.2-1.4 GHz	50 V	LDMOS	L-Band Radar	LTN/PTVA120251EA V1	-
CGH40120F/P	120	1.2-1.4 GHz	28 V	GaN	L-Band Radar	CGH40120F-AMP	CGH40120P-AMP
CGHV14250F/P	250	1.2-1.4 GHz	50 V	GaN	L-Band Radar	CGHV14250F-AMP	-
PTVA123501EC	350	1.2-1.4 GHz	50 V	LDMOS	L-Band Radar	LTN/PTVA123501EC V1	-
CGHV14500F/P	500	1.2-1.4 GHz	50 V	GaN	L-Band Radar	CGHV14500F-AMP	-



Radar

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for other transistor package styles
PTVA127002EV	700	1.2-1.4 GHz	50 V	LD MOS	L-Band Radar	LTN/PTVA127002EV V1	-
CGHV14800F	800	1.2-1.4GHz	50 V	GaN	L-Band Radar	CGHV14800F-AMP	-
CGH35060F2/P2	60	3.1-3.5 GHz	28 V	GaN	S-Band Radar	CGH35060F2-AMP	-
CGHV35060MP	60	3.1-3.5 GHz	50 V	GaN	S-Band Radar	CGHV35060MP-AMP1	-
CGHV35150F/P	150	2.9-3.5 GHz	50 V	GaN	S-Band Radar	CGHV35150F-AMP	-
CGH31240F	240	2.7-3.1 GHz	28 V	GaN	S-Band Radar	CGH31240F-AMP	-
CGH35240F	240	3.1-3.5 GHz	28 V	GaN	S-Band Radar	CGH35240F-AMP	-
CGHV35400F	400	2.9-3.5 GHz	50 V	GaN	S-Band Radar	CGHV35400F-AMP	-
CGHV37400F	400	3.3-3.7 GHz	50 V	GaN	S-Band Radar	CGHV37400F-AMP	-
CGHV31500F	500	2.7-3.1 GHz	50 V	GaN	S-Band Radar	CGHV31500F-AMP	-
CGHV1F006S	6	4.9-5.9 GHz	20 V	GaN	C-Band Radar	CGHV1F006S-AMP4	-
CGH55015F/P	15	5.4-5.9 GHz	28 V	GaN	C-Band Radar	CGH55015F2-AMP	-
CGH55030F/P	30	5.4-5.9 GHz	28 V	GaN	C-Band Radar	CGH55030F2-AMP	-
CGHV59070F	70	4.8-5.9 GHz	50 V	GaN	C-Band Radar	CGHV59070F-AMP	-
CGHV59350F	350	5.2-5.9 GHz	50 V	GaN	C-Band Radar	CGHV59350F-AMP	-
CGHV1F006S	6	8.5-9.6 GHz	40 V	GaN	X-Band Radar	CGHV1F006S-AMP3	-
CGHV1F025S	25	8.9-9.6 GHz	40 V	GaN	X-Band Radar	CGHV1F025F-AMP1	-
GTVA123501FA	350	1.2 - 1.4 GHz	50 V	GaN	L-Band Radar	LTN/GTVA123501FA-V1	
GTVA311801FA	180	2.7 - 3.1 GHz	50 V	GaN	S-Band Radar	LTN/GTVA311801FA V1	
GTVA126001EC	600	1.2 - 1.4 GHz	50 V	GaN	L-Band Radar	GTVA126001EC-AMP1	
GTVA355001FC	500	2.9 - 3.5 GHz	50 V	GaN	S-Band Radar	LTN/GTVA355001FC V1	
GTVA101K42EV	1400	1.2 - 1.4 GHz	50 V	GaN	L-Band Radar	GTVA101K42EV-AMP2	



SatCom

Law enforcement needs it. TV networks need it. Boy Scouts need it. Immediate, reliable, power-sipping voice and data transmission keeps the world connected, and Wolfspeed GaN RF semiconductors enable it with unmatched performance and a bulletproof reputation for reliability.

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for other transistor package styles
CGHV1F006S	6	5.8-7.2 GHz	40 V	GaN	SatCom	CGHV1F006S-AMP1	-
CGHV1F006S	6	7.9-8.4 GHz	40 V	GaN	SatCom	CGHV1F006S-AMP2	-
CGHV1F025S	25	4.4-5.0 GHz	40 V	GaN	SatCom	CGHV1F025S-AMP4	-
CGHV96050F1	50	7.9-9.6 GHz	50 V	GaN	SatCom	CGHV96050F2-AMP	-

Avionics

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Additional Circuits for Other Packages
CGHV27030S	3	1.03 - 1.09 GHz	50 V	GaN	Avionics	CGHV27030S-AMP8	
CGHV14800F	800	1.03 - 1.09 GHz	50 V	GaN	Avionics	CGHV14800F-AMP3	
PTVA101K42EV	1000	1.03-1.09 GHz	50 V	LDMOS	Avionics	LTN/PTVA101K42EV V1	
PTVA102001EA	200	1.03-1.09 GHz	50 V	LDMOS	Avionics	LTN/PTVA102001EA V1	
GTVA101K42EV	1400	1.03 GHz	50 V	GaN	Avionics	LTN/GTVA101K42EV V1	

Communication Infrastructure

Civilian communications infrastructure, otherwise referred to as 3,4 and 5G, keeps us connected. Wolfspeed's RF devices keep you linked over longer distances and with faster download speeds.

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Application Circuit Part # for Pill Packages
CG2H40010F/P	10	3.5-3.9 GHz	28 V	GaN	Telecom	CG2H40010F-AMP	-
CG2H40025F/P	25	3.4-3.8 GHz	28 V	GaN	Telecom	CG2H40025F-AMP	CG2H40025P-AMP
CG2H40045F/P	45	2.3-2.7 GHz	28 V	GaN	Telecom	CG2H40045F-AMP	CG2H40045P-AMP
CGH27015F/P	15	2.3-2.9 GHz	28 V	GaN	Telecom	CGH27015F-AMP	CGH27015P-AMP
CGH27030F/P	30	2.3-2.7 GHz	28 V	GaN	Telecom	CGH27030F-AMP	CGH27030P-AMP
CGH27030S	30	1.8-2.2 GHz	28 V	GaN	Telecom	CGH27030S-AMP1	-



Communication Infrastructure

Device	Output Power (W)	Frequency Range	Voltage	Technology	Market Application	Application Circuit Part #	Application Circuit Part # for Pill Packages
CGH27030S	30	2.3-2.7 GHz	28 V	GaN	Telecom	CGH27030S-AMP2	-
CGH35015F/P	15	3.3-3.9 GHz	28 V	GaN	Telecom	CGH35015F-AMP	-
CGH35030F/P	30	3.3-3.9	28 V	GaN	Telecom	CGH35030F-AMP	-
CGH35060F1/P1	60	3.3-3.6 GHz	28 V	GaN	Telecom	CGH35060F1-AMP	-
CGH40010F/P	10	3.5-3.9 GHz	28 V	GaN	Telecom	CGH40010F-AMP	-
CGH40025F/P	25	3.4-3.8 GHz	28 V	GaN	Telecom	CGH40025F-AMP	-
CGH40035F/P	35	3.3-3.7 GHz	28 V	GaN	Telecom	CGH40035F-AMP	-
CGH40045F/P	45	2.3-2.7 GHz	28 V	GaN	Telecom	CGH40045F-AMP	-
CGHV1F006S	6	3.4-3.8 GHz	40 V	GaN	Telecom	CGHV1F006S-AMP6	-
CGHV27015S	15	2.4-2.7 GHz	50 V	GaN	Telecom	CGHV1F025S-AMP3	-
CGHV27030S	30	2.5-2.7 GHz	50 V	GaN	Telecom	CGHV27030S-AMP1	-
CGHV27030S	30	2.5-2.7 GHz	28 V	GaN	Telecom	CGHV27030S-AMP2	-
CGHV27030S	30	1.8-2.2 GHz	28 V	GaN	Telecom	CGHV27030S-AMP3	-
CGHV27060MP	60	2.5-2.7 GHz	50 V	GaN	Telecom	CGHV27060MP-AMP1	-