

GaN RF PRODUCTS

From
transistors
to packaged
MMICs



Defense



Satellites



Point
to Point



Air
traffic



Point to Multipoint



Satcom

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Complete & flexible offer



Field proven performance



Easy to use solutions



European technologies qualified
for Space



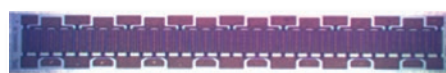
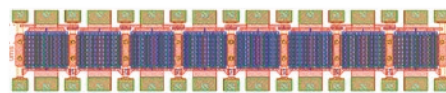
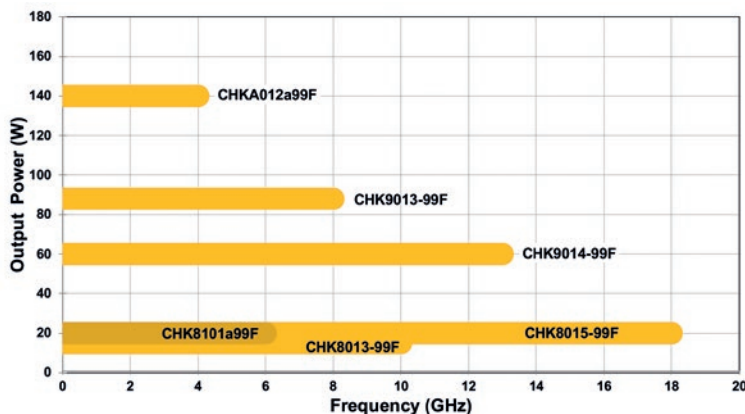
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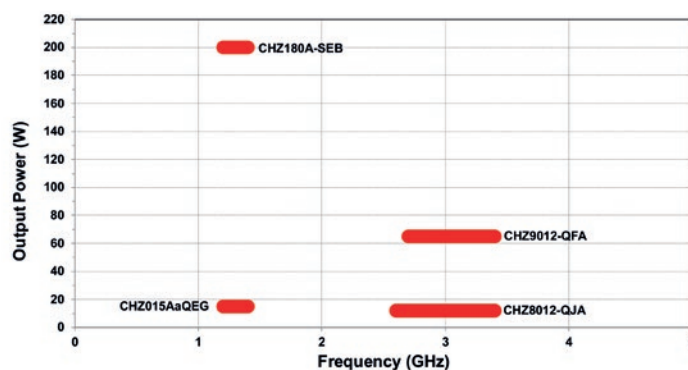
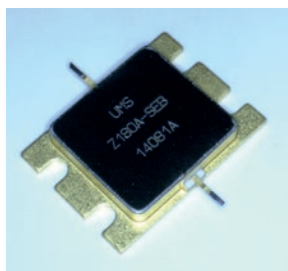
TRANSISTORS

GaN HEMT Transistor Dies



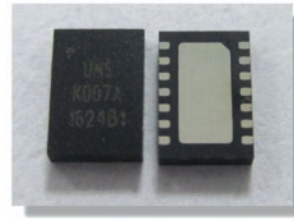
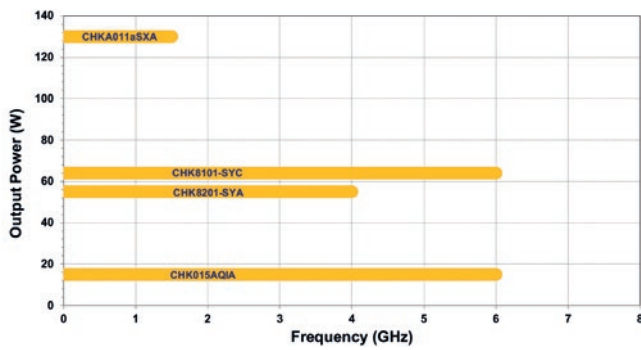
Part Number	Frequency (GHz)	Saturated Power (W)	Glin (dB)	PAE (%)	Bias (A)	Bias (V)	Case
CHKA012a99F	Up to 4	140	19 @ 3GHz	65 @ 3GHz	0.65	50	Die
CHK8101a99F	Up to 6	20	14 @ 6GHz	60 @ 6GHz	0.1	50	Die
CHK9013-99F	Up to 8	88	18 @ 6GHz	65 @ 6GHz	1.1	30	Die
CHK8013-99F	Up to 10	14	17 @ 6GHz	70 @ 6GHz	0.18	30	Die
CHK9014-99F	Up to 13	60	13 @ 12GHz	50 @ 12GHz	0.7	30	Die
CHK8015-99F	Up to 18	20	12 @ 15GHz	50 @ 15GHz	0.2	30	Die

Internally Matched GaN Power Transistors



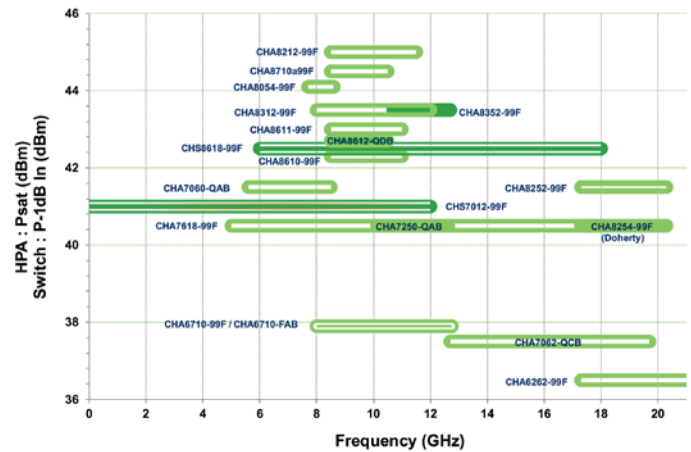
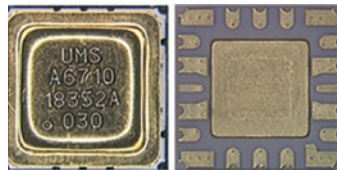
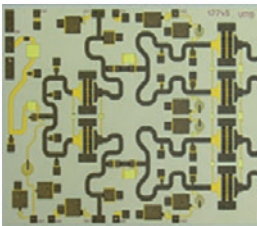
Part Number	Frequency (GHz)	Linear Gain (dB)	Power (W)	Associated Gain (dB)	PAE (%)	Bias	Case
CHZ180AaSEB	1.2-1.4	20	200	>14	52	VDS 45V @ID_Q 1.3A	Ceramic Metal Flange
CHZ015AaQEG	1.2-1.4	17.2	15	>14	>55	VDS 45V @ID_Q 0.1A	QFN Plastic Package
CHZ8012-QJA	2.6-3.4	16.5	12	11	54	VDS 30V @ID_Q 180mA	QFN Plastic Package
CHZ9012-QFA	2.7-3.4	16	65	12	55	VDS 30V @ID_Q 800mA	QFN Plastic Package

■ GaN HEMT Packaged Transistors



Part Number	Frequency (GHz)	Saturated Power (W)	Glin (dB)	PAE (%)	Bias (A)	Bias (V)	Case
CHKA011aSXA	Up to 1.5	130	23.5 @ 0.44GHz	75 @ 0.5GHz	0.64	50	Ceramic Metal Flange
CHK015AaQIA	Up to 6	15	13 @ 6GHz	55 @ 6GHz	0.1	50	QFN Plastic
CHK8101-SYC	Up to 6	20	12 @ 6GHz	64 @ 1.3 GHz	0.1	50	Ceramic Metal Flange

MMICs



■ High Power GaN Amplifiers

Part Number	Frequency (GHz)	Gain (dB)	Psat (dBm)	PAE %	Bias (mA)	Bias (V)	Case
CHA7618-99F	5-18	30	40 @ 8dB comp	24 @ 8dB comp	800	18	Die
CHA7060-QAB	5.6-8.5	30	41	40 @ Psat	420	20	QFN
CHA8054-99F	7.7-8.6	27	43.6	50 @ 7dB comp	900	28	Die
CHA8312-99F	8-12	26	43	50 @ 23dBm	320	20	Die
CHA6710-99F	8-12.75	23.5	37.4	36 @ Psat	200	25	Die
CHA6710-FAB	8-12.75	22.5	37	35 @ Psat	200	25	Hermetic SMD
CHA8710a99F	8.5-10.5	28.5	44	44 @ Psat	750	25	Die
CHA8612-QDB	8.5-10.5	24	42	30 @ Psat	680	30	QFN
CHA8610-99F	8.5-11	24	42	40 @ Psat	680	30	Die
CHA8611-99F	8.5-11	24	42.5	43 @ Psat	800	25	Die
CHA8212-99F	8.5-11.5	34	44	36 @ 7dB comp	840	28	Die
CHA7250-QAB	10-12.75	20	40	20 @ 37dBm	130	20	QFN
CHA8352-99F	10.7-12.75	25	43	45 @ 43dBm	500	20	Die
CHA7062-QCB	12.7-19.7	20	37	20 @ 37dBm	300	20	QFN
CHA8252-99F	17.3-20.3	31	41	35 @ 16dBm	300	18	Die
CHA8254-99F	17.3-20.3	29	40	31 @ 20dBm 27 @ 14dBm	225	15	Die
CHA6262-99F	17.3-21.3	29	36	25 @ Psat	260	18	Die

— MMICs... continued —

■ High Power GaN Switches

Part Number	Frequency (GHz)	Loss (dB)	P-1 dB In (dBm)	Isolation (dB)	Type	Case
CHS7012-99F	DC-12	1.4	40.5	35	Reflective	Die
CHS8618-99F	6-18	1.3	42	34	Reflective	Die



COTS to highly customised solutions



GaN on SiC proprietary technologies



GaN foundry access



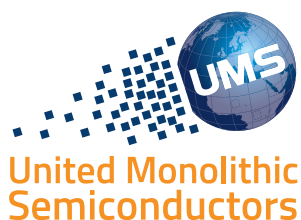
Accurate non-linear models



In-house Assembly line



Technologies qualified for Space



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