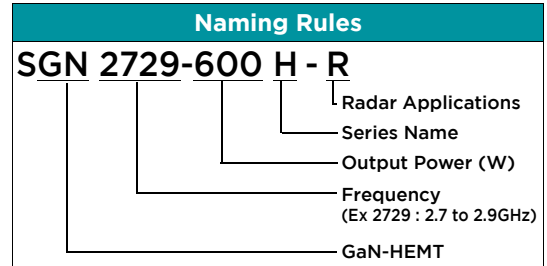


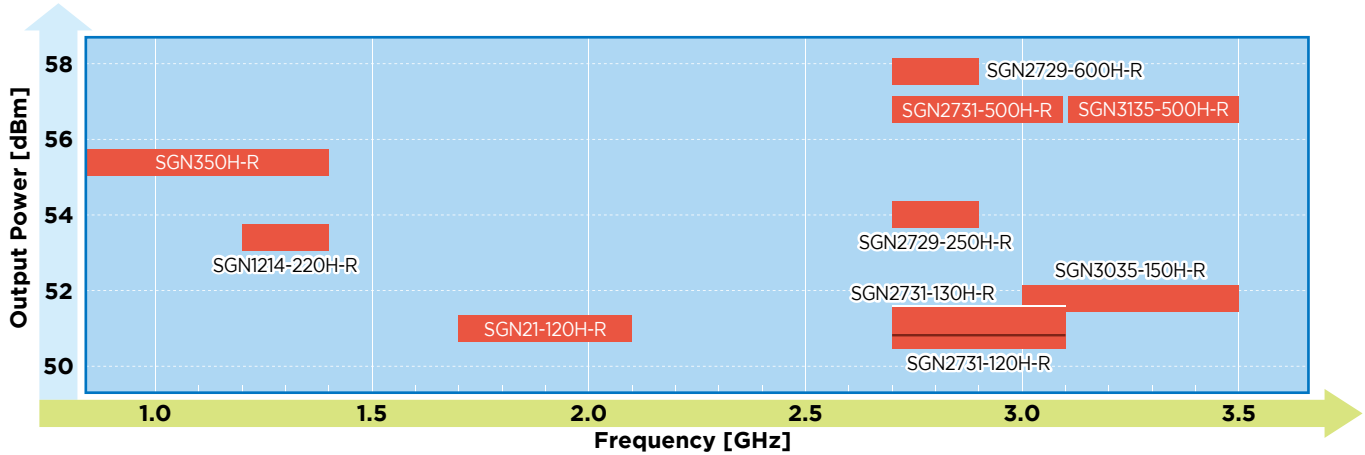
# GaN HEMTs for Radar

## Features

- Designed for S-band Radar Applications
- 50 ohm matched
- High Power: Up to 600W
- High Efficiency: 65%
- High Operating Voltage: 50V
- Broadband Operation
- High Gain
- Low Thermal Resistance (Rth)



## GaN HEMTs for Radar L/S Lineup



## Specifications

Part Number	Freq. (GHz)	Pout Min. (dBm)	Gp Min. (dB)	$\eta_D$ Typ. (%)	VDS (V)	IDS (DC) (A)	Rth ( $^{\circ}\text{C}/\text{W}$ )	Condition	Package
SGN350H-R	DC-1.4	55.4	15.4	70	50	0.5	0.55	Pulse width: 150 $\mu\text{sec}$ , Duty 10%	M1H
SGN1214-220H-R	1.2-1.4	53.4	16.9	65	50	1	0.55	Pulse width: 200 $\mu\text{sec}$ , Duty 10%	IV
SGN21-120H-R	1.7-2.5	51	14.5	67.5	50	0.5	1.1		
SGN2729-250H-R	2.7-2.9	54	13	65	50	0.75	1.1	Pulse width: 120 $\mu\text{sec}$ , Duty 10%	I2D
SGN2729-600H-R	2.7-2.9	57.8	12.8	60	50	1.5	0.55	Pulse width: 200 $\mu\text{sec}$ , Duty 10%	
SGN2731-120H-R	2.7-3.1	50.8	11.8	63	50	0.5	1.1	Pulse width: 200 $\mu\text{sec}$ , Duty 10%	IV
SGN2731-130H-R	2.7-3.1	51.2	13.2	62	50	0.5	1.1	Pulse width: 400 $\mu\text{sec}$ , Duty 25%	
SGN2731-500H-R	2.7-3.1	56.8	11.8	57	50	1.5	0.55	Pulse width: 120 $\mu\text{sec}$ , Duty 10%	
SGN3035-150H-R	3.0-3.5	51.8	12.8	62	50	0.5	1.1	Pulse width: 200 $\mu\text{sec}$ , Duty 10%	IV
SGN3135-500H-R	3.1-3.5	56.8	10.8	58	50	1.5	0.55		

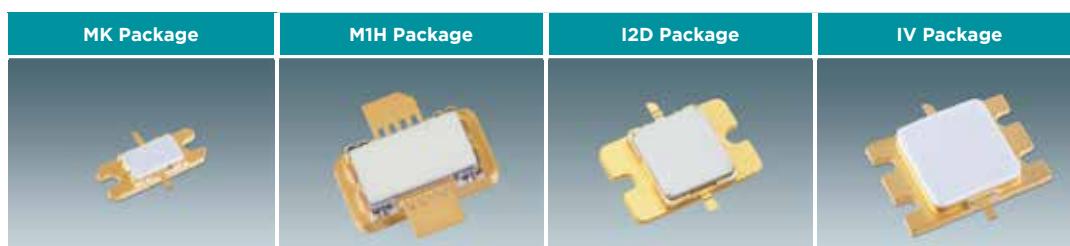
\*: Test Frequency 2.1GHz  
 Note: Tc (op)=+25 $^{\circ}\text{C}$

## Specifications (Driver Stage)

Part Number	Freq. (GHz)	P3dB (dBm)	GL (dB)	$\eta_{\text{add}}$ (%)	VDS (V)	IDS (DC) (mA)	Rth ( $^{\circ}\text{C}/\text{W}$ )	Condition	Package
SGN31E030MK	3.1	46	15	40	50	200	2	CW	MK

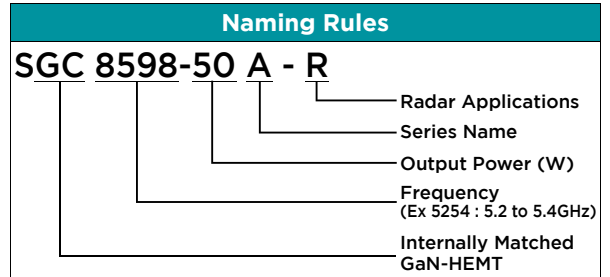
Note: Tc (op)=+25 $^{\circ}\text{C}$

## Product Photo

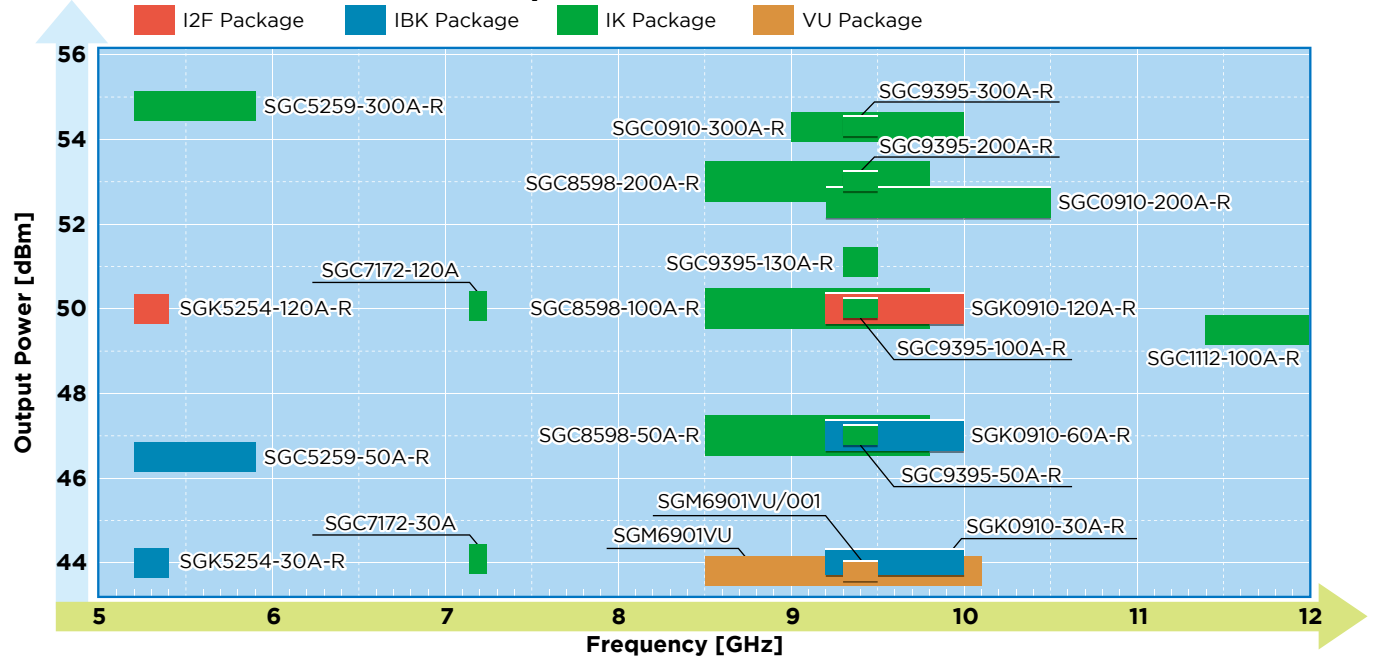


## Features

- High Output Power
- High Gain
- High Efficiency
- Internally Matched



## GaN HEMTs for Radar C/X Lineup



## Specifications (C/X)

Part Number	Freq. (GHz)	Pout Min. (dBm)	Gp Min. (dB)	$\eta_{add}$ Typ. (%)	VDS (V)	IDS(DC) (A)	Rth (°C/W)	Condition	Package
SGK5254-30A-R	5.2-5.4	44	11.5	49	24	1.3	2.2	Pulse Width:100µsec,Duty:10%	IBK
SGK5254-120A-R	5.2-5.4	50	11.5	47	24	5.3	0.65		I2F
SGC5259-50A-R	5.2-5.9	46.5	11.5	50	50	0.17	2.4		IBK
SGC5259-300A-R	5.2-5.9	54.8	13.8	50	50	1	0.7	CW	IK
SGC7172-30A	7.14-7.24	44.15	11.15	45	50	0.2	2.3		
SGC7172-120A	7.14-7.24	50.35	11.35	43	50	1.3	0.65	Pulse Width:100µsec,Duty:10%	IK
SGC8598-50A-R	8.5-9.8	47	10	40	50	0.17	2.4		
SGC8598-100A-R	8.5-9.8	50	9	40	50	0.33	1.4		
SGC8598-200A-R	8.5-9.8	53	9	38	50	0.66	0.6		
SGK0910-30A-R	9.2-10	44	11.5	35	24	1.3	2.2		
SGK0910-60A-R	9.2-10	47	11.5	35	24	2.6	1.1		
SGK0910-120A-R	9.2-10	50	11.5	35	24	5.3	0.65		
SGC0910-200A-R	9.2-10.5	52.5	8.5	38	50	0.66	0.6		
SGC0910-300A-R	9.0-10.0	54.3	8.3	35	50	1	0.7		
SGC9395-50A-R	9.3-9.5	47	10	40	50	0.17	2.4		
SGC9395-100A-R	9.3-9.5	50	9	40	50	0.33	1.4		
SGC9395-130A-R	9.3-9.5	51.1	9.1	38	50	0.5	1.2		
SGC9395-200A-R	9.3-9.5	53	9	38	50	0.66	0.6		
SGC9395-300A-R	9.3-9.5	54.3	8.3	35	50	1	0.7		
SGC1112-100A-R	11.4-12.0	49.5	7.5	36	50	1	1.4		
SGM6901VU	8.5-10.1	43.8	21.8	38	50	0.2	2.1	VU	
SGM6901VU/001	9.3-9.5	43.8	21.8	38	50	0.2	2.1		

Note: Tc (op)=+25°C

## Product Photo

