SUMITOMO ELECTRIC
Connect with Innovation

Wireless Device Products 2026

SUMITOMO ELECTRIC GROUP

Power GaN

GaN HEMTs for Radar C/X-band

Features

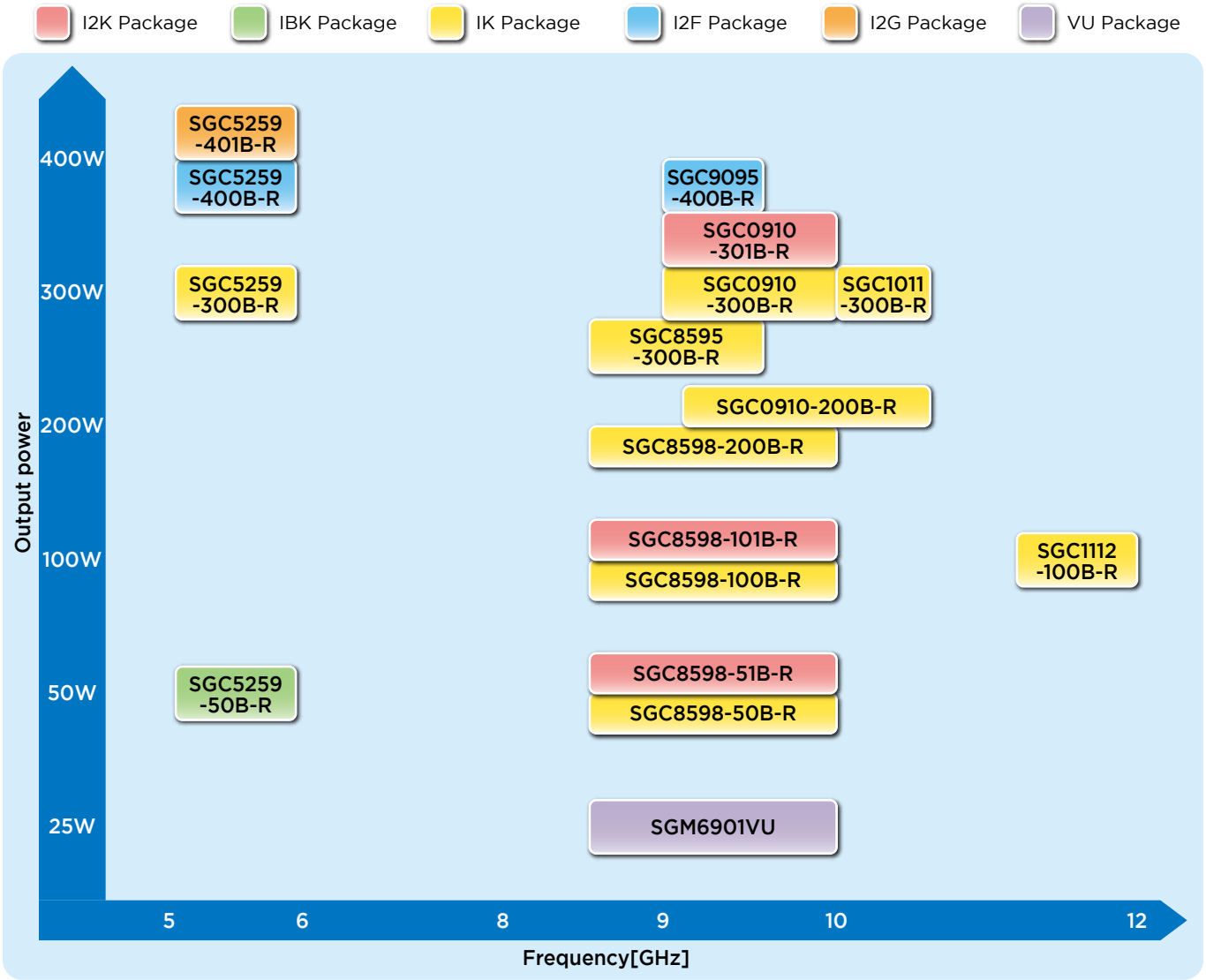
- High Power up to 520W(Typ.)
- High Gain
- High Efficiency
- Broad Band
- Impedance Matched Z in/Z out = 50ohm
- Small Flangeless Package

Naming Rules

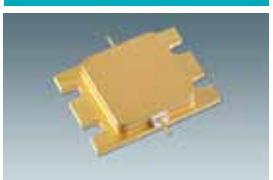
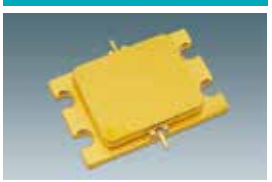
SGC 8598-50 B - R

- R: Radar Applications
- B: Series Name
- 50: Output Power (W)
- 8598: Frequency (Ex 5254 : 5.2 to 5.4GHz)
- SGC: Internally Matched GaN-HEMT

GaN HEMTs for Radar C/X Lineup



Product Photo

VU Package	IBK Package	IK Package	I2F Package	I2K Package
				

Part Number	Freq. (GHz)	Pout Typ. (dBm)	Gp Typ. (dB)	Efficiency (%)	VDS (V)	IDS(DC) (A)	Conditions Pulse Width/Duty	Pkg
SGC5259-50B-R	5.2-5.9	48	13	51	50	0.17	100µs/10%	IBK
SGC5259-300B-R	5.2-5.9	55.8(~5.7) 55.4(5.7~)	13.8(~5.7) 13.4(5.7~)	51	50	1		IK
SGC5259-400B-R	5.2-5.9	57.2	14.2	50	50	1.3		I2F
SGC5259-401B-R	5.2-5.9	57.2	14.2	50	50	1.3		I2G
SGC8598-50B-R	8.5-9.8	48	11	41	50	0.17		IK
SGC8598-51B-R	8.5-9.8	48	11	41	50	0.17		I2K
SGC8598-100B-R	8.5-9.8	51	10	41	50	0.33		IK
SGC8598-101B-R	8.5-9.8	51	10	39	50	0.33		I2K
SGC8598-200B-R	8.5-9.8	54	10	39	50	0.66		IK
SGC8595-300B-R	8.5-9.5	55.3(~9.17) 54.7(9.17~)	9.3(~9.17) 8.7(9.17~)	38	50	1		
SGC0910-200B-R	9.2-10.5	53.5(~10.1) 52.5(10.1~)	9.5(~10.1) 8.5(10.1~)	39	50	0.66		
SGC0910-300B-R	9-10	55.3(~9.6) 54.7(9.6~)	9.3(~9.6) 8.7(9.6~)	38	50	1		
SGC0910-301B-R	9-10	55.3(~9.6) 54.7(9.6~)	9.3(~9.6) 8.7(9.6~)	38	50	1		I2K
SGC9095-400B-R	9.0-9.5	56.5	8.5	38	50	1		I2F
SGC1011-300B-R	9.8-10.5	55(~10.3) 54.4(10.3~)	9.0(~10.3) 8.4(10.3~)	37	50	1		IK
SGC1112-100B-R	11.4-12	51	9	37	50	1		
SGM6901VU	8.5-10.1	45.3(~9.8) 44.8(9.8~)	23.3(~9.8) 22.8(9.8~)	38	50	0.2		VU

I2G Package

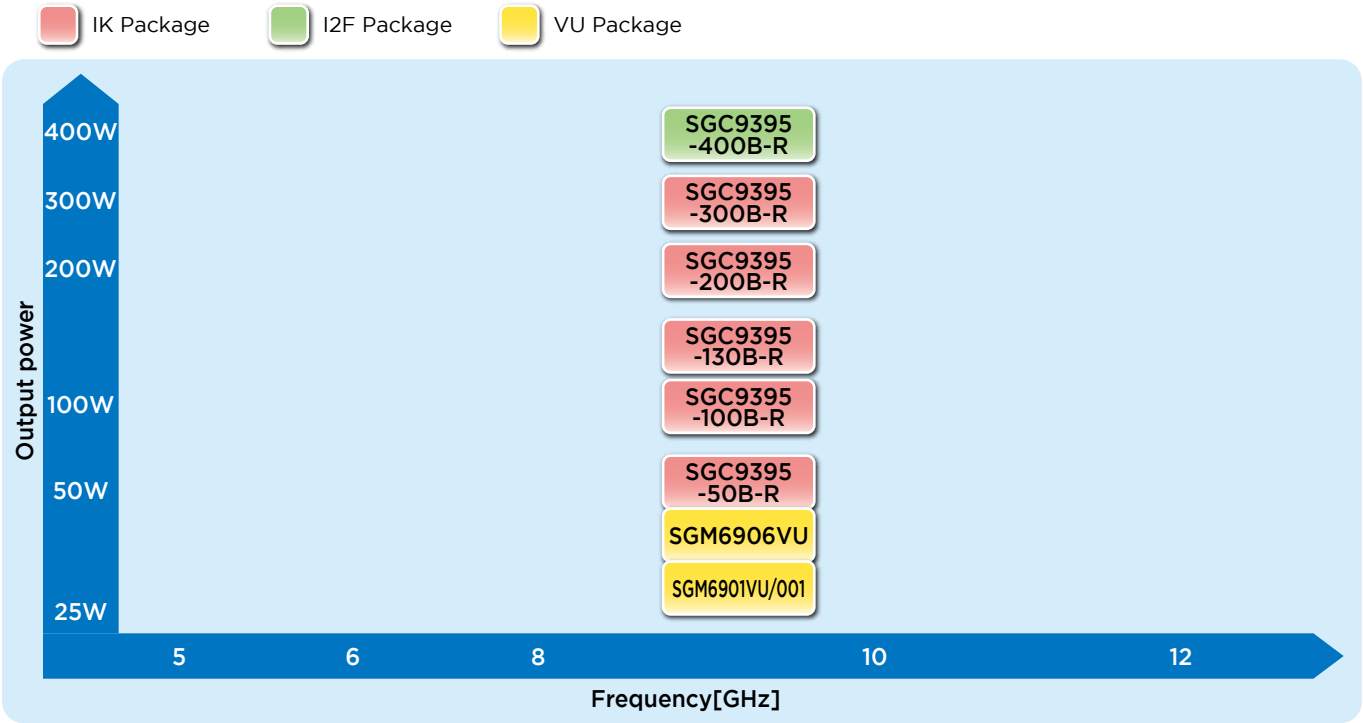
Power GaN

GaN HEMTs for Marine Radar

Features

- High Power up to 450W(Typ.)
- High Gain
- High Efficiency
- For Marine Radar
- Impedance Matched Z in/Z out = 50ohm

GaN HEMTs for Marine Radar Lineup



Part Number	Freq. (GHz)	Pout Typ. (dBm)	Gp Typ. (dB)	Efficiency (%)	VDS (V)	IDS(DC) (A)	Conditions Pulse Width/Duty	Pkg
SGC9395-50B-R	9.3-9.5	48	11	41	50	0.17	100µs/10%	IK
SGC9395-100B-R	9.3-9.5	51	10	41	50	0.33		
SGC9395-130B-R	9.3-9.5	52	10	39	50	0.5		
SGC9395-200B-R	9.3-9.5	54	10	39	50	0.66		
SGC9395-300B-R	9.3-9.5	55.3	9.3	38	50	1		
SGC9395-400B-R	9.3-9.5	56.5	8.5	38	50	1.3		I2F
SGM6906VU	9.2-9.5	47.5	22.5	37	50	0.2	50µs/5%	VU
SGM6901VU/001	9.3-9.5	45.3	23.3	38	50	0.2	100µs/10%	

Product Photo

VU Package	IK Package	I2F Package
		

Power GaN

GaN HEMTs for Radar L/S-band

Features

- High Power up to 1000W(Typ.)
- High Gain
- High Efficiency
- Broad Band

Naming Rules

SGN 2731-500 L - R

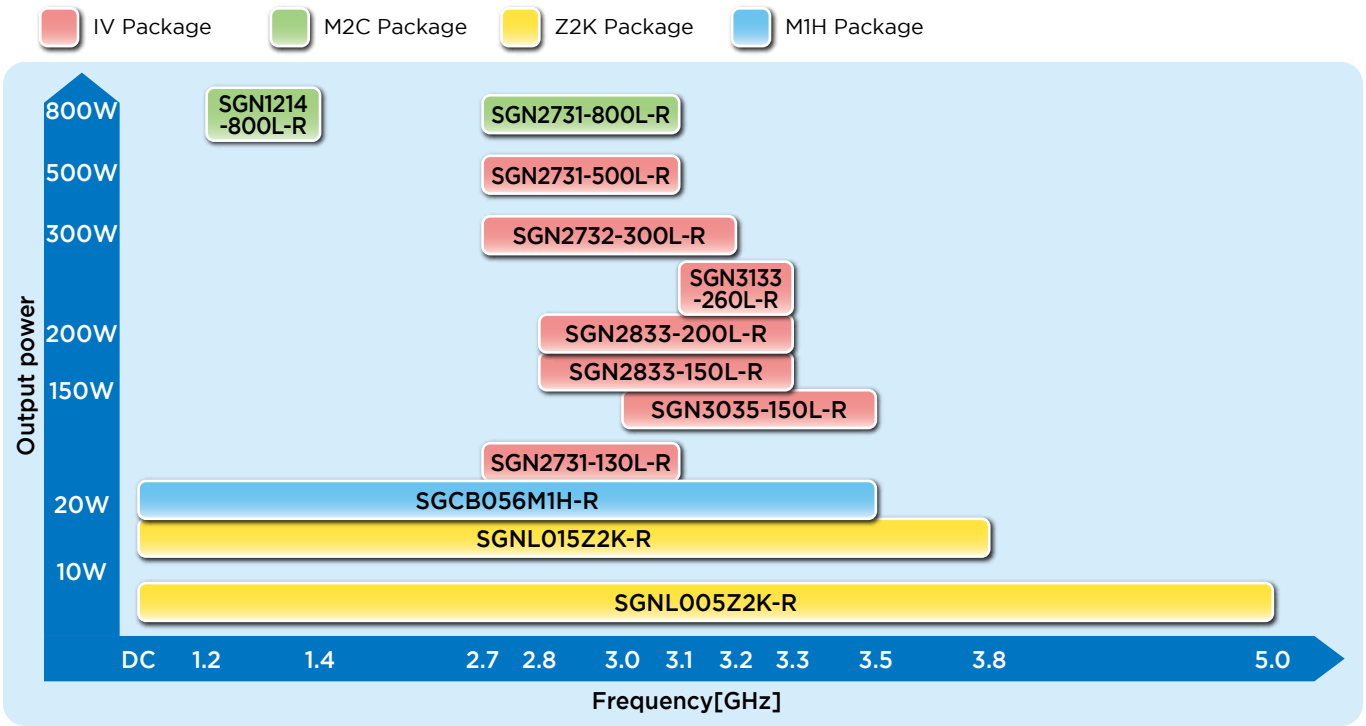
- R: Radar Applications
- L: Series Name
- 500: Output Power (W)
- 2731: Frequency (Ex 2729 : 2.7 to 2.9GHz)
- SGN: GaN-HEMT

Naming Rules (Driver Stage)

SGN L 015 Z2K - R

- R: Radar Applications
- Z2K: Package Type
- 015: Output Power (W)
- L: Series Name
- SGN: GaN-HEMT

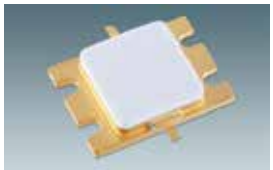
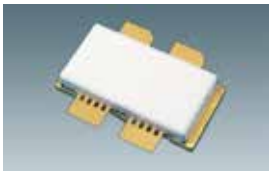
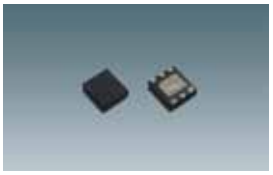
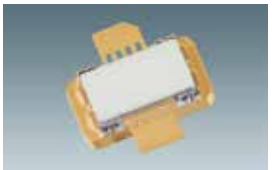
GaN HEMTs for Radar L/S Lineup



	Part Number	Freq. (GHz)	Pout Typ. (dBm)	Gp Typ. (dB)	Efficiency (%)	VDS (V)	IDS (DC)	Conditions Pulse Width/Duty	Pkg
*	SGNL005Z2K-R	DC-5.0	38.3 38.0	12.8 12.5	52 49	50	0.02	5μs/10% 3000μs/30%	Z2K
*	SGNL015Z2K-R	DC-3.8	42.4 42.1	11.9 11.6	56 53	50	0.06	5μs/10% 3000μs/30%	
*	SGCB056M1H-R	DC-3.5	47.5 47.2	13.5 13.2	60 57	50	0.13	200μs/10% 3000μs/30%	M1H
	SGN1214-800L-R	1.2-1.4	59	15	64	50	0.5	200μs/10%	M2C
*	SGN2731-130L-R	2.7-3.1	52.2 51.9	14.2 13.9	62 59	50	0.5	400μs/25% 3000μs/30%	IV
*	SGN3035-150L-R	3.0-3.5	52.8 52.3	13.8 13.5	62 59	50	0.5	200μs/10% 3000μs/30%	
*	SGN2833-150L-R	2.8-3.3	52.8 52.5	13.8 13.5	62 59	50	0.5	200μs/10% 3000μs/30%	
*	SGN2833-200L-R	2.8-3.3	54.0 53.7	12.0 11.7	60 57	50	0.5	200μs/10% 3000μs/30%	
	SGN3133-260L-R	3.1-3.3	55.1	11.4	57	32	1	200μs/10%	
	SGN2732-300L-R	2.7-3.2	55.5	15.5	62	50	1	200μs/10%	
	SGN2731-500L-R	2.7-3.1	57.4	12.4	57	50	1.5	120μs/10%	
	SGN2731-800L-R	2.7-3.1	60	15	60	50	0.5	200μs/10%	M2C

* Long pulse, High duty capable

Product Photo

IV Package	M2C Package	Z2K Package	M1H Package
			

GaN HEMTs for Radio Link and SATCOM

Features

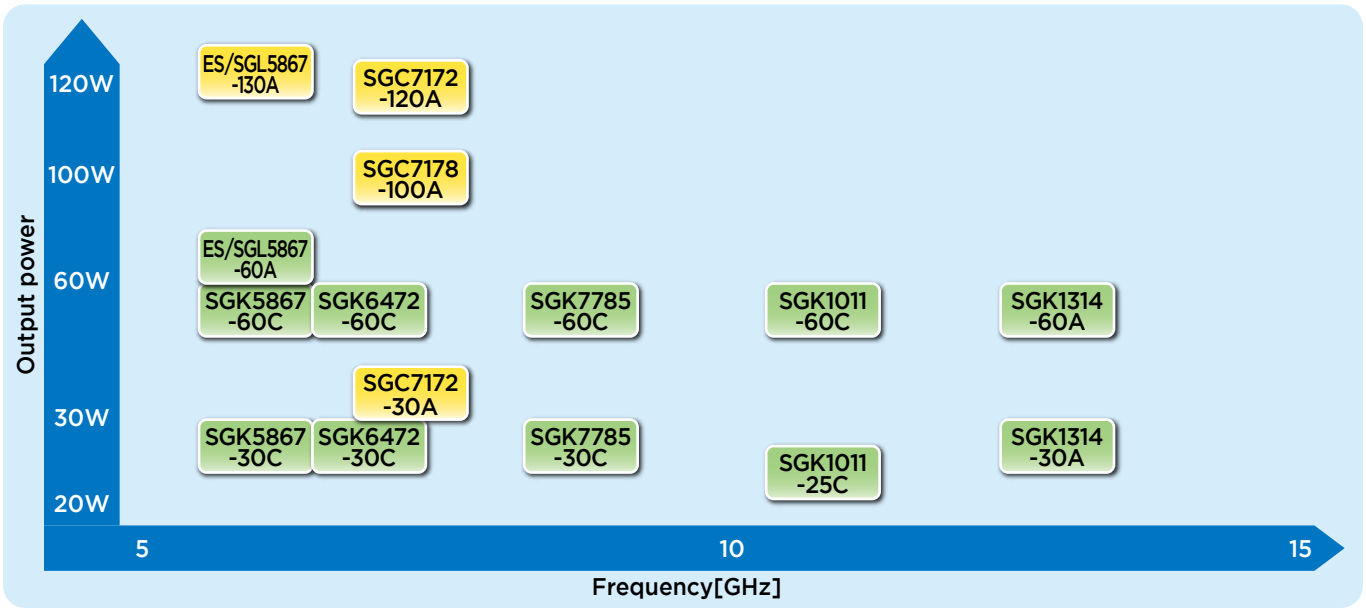
- High Output Power
- High Gain
- High Efficiency
- Internally Matched

Naming Rules

SGK 7785-30 C

- C — Series Name
- 30 — Output Power (W)
- 7785 — Frequency (Ex 7785 : 7.7 to 8.5GHz)
- SGK — Internally Matched GaN-HEMT

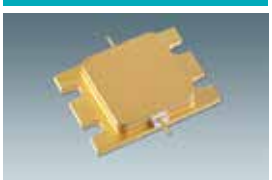
GaN HEMTs for Satcom Lineup



	Part Number	Freq. (GHz)	IM3 (dBc)	SCL Pout (dBm)	Pout (dBm)	GL (dB)	ηadd (%)	VDS (V)	IDS(DC) (A)	IDS(RF) (A)	Rth (°C/W)	Pkg
	SGK5867-30C	5.85-6.75	-42	29.5	45	15	41	24	1.75	3.2	2.2	IBK
	SGK5867-60C	5.85-6.75	-42	32	48	14	39	24	2.6	6.4	1.3	
	SGK6472-30C	6.4-7.2	-42	29.5	45	14.5	40	24	1.75	3.2	2.2	
	SGK6472-60C	6.4-7.2	-42	32	48	13.5	41	24	2.6	6.4	1.3	
	SGK7785-30C	7.7-8.5	-42	29.5	45	14	44	24	1.75	3.2	2.2	
	SGK7785-60C	7.7-8.5	-42	32	48	13	40	24	2.6	6.4	1.3	
	SGK1011-25C	10.7-11.7	-42	29	45.5	11	40	24	1.2	3	1.9	
	SGK1011-60C	10.7-11.7	-40	32	48.5	10	35	24	2.6	7.1	1.1	
	SGK1314-30A	13.75-14.5	-30	38.5	45	8.5	32	24	0.9	3.3	1.5	
	SGK1314-60A	13.75-14.5	-30	41.5	48	8.5	32	24	1.8	6.6	0.8	
	SGC7178-100A	7.1-7.8	-27	44	50	12	36	35	0.8	6	0.65	IK
	SGC7172-30A	7.14-7.24	-30	38	45.15	12.15	45	50	0.2	1.4	2.3	
	SGC7172-120A	7.14-7.24	-33	44	51.3	12.3	43	50	1.3	5.9	0.65	
*	ES/SGL5867-60A	5.85-6.75	-30	41	48	14	40	40	0.4	5.0	1.2	IBK
*	ES/SGL5867-130A	5.85-6.75	-30	44	51	13.5	40	40	0.8	8.0	0.7	IK

* Under Development

Product Photo

IBK Package	IK Package
	

GaN HEMTs for General Purpose

Features

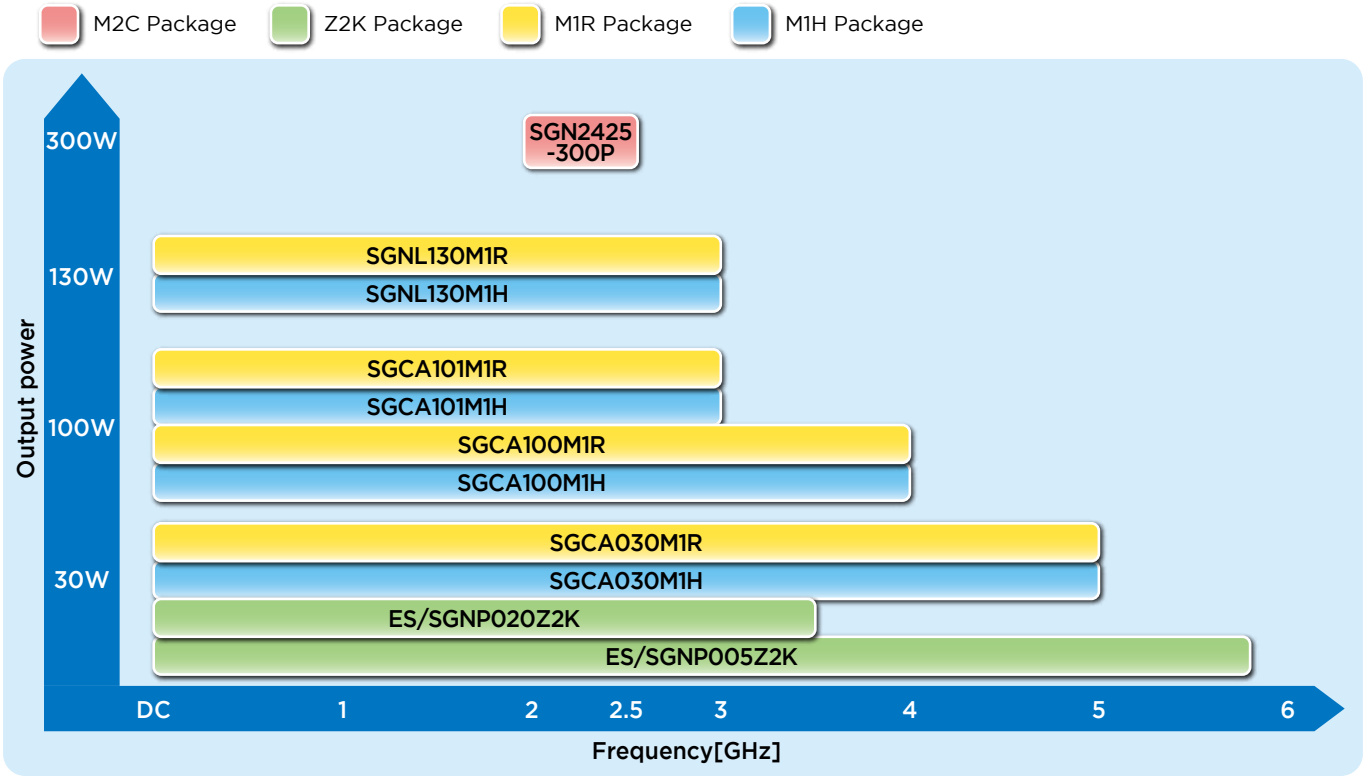
- High Power up to 315W(typ)
- High Efficiency
- CW Operable
- Concurrent Broadband Operation
- Small Flangeless Package

Naming Rules

SGN L 130 M1H

- M1H — Package Code
- 130 — Output Power (W)
- L — Series Name
- SGN — GaN-HEMT

GaN HEMTs for General Purpose Lineup



Part Number	Freq. (GHz)	Operation	VDS (V)	Spec. frequency	Pout Typ. (dBm)	Gp Typ. (dB)	ηD Typ. (%)	Pkg
ES/SGNP005Z2K	DC-5.8	CW	50	2.45	37.2	21.0 *1	70	Z2K
ES/SGNP020Z2K	DC-3.5	CW	50	2.45	43.2	21.0 *1	70	
SGCA030M1H	DC-5	CW	50	5	45.5	9.5	53	M1H
SGCA030M1R	DC-5	CW	50	5	45.5	9.5	53	M1R
SGCA100M1H	DC-4	CW	50	3.9	50.5	14.5	48	M1H
SGCA100M1R	DC-4	CW	50	3.9	50.5	14.5	48	M1R
SGCA101M1H	DC-3	CW	50	3	50.1	12.1	56	M1H
SGCA101M1R	DC-3	CW	50	3	50.1	12.1	56	M1R
SGNL130M1H	DC-3.0	CW	50	3	51.9	15.9	56.5	M1H
SGNL130M1R	DC-3.0	CW	50	3	51.9	15.9	56.5	M1R
SGN2425-300P	2.4-2.5	CW	50	2.45	55 *2	22.0 *1	77	M2C

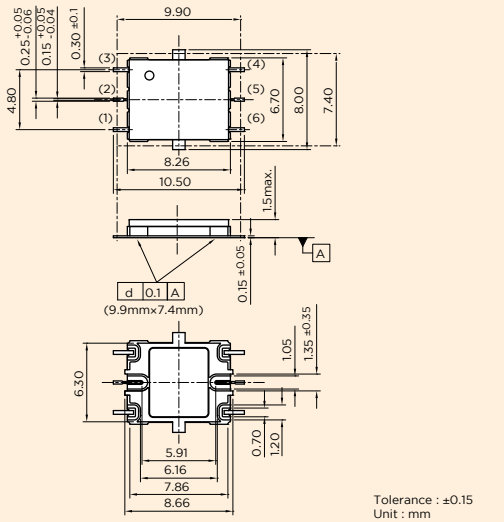
*1 : Linear Gain
*2 : P4dB

Product Photo

M1H Package	M1R Package	Z2K Package	M2C Package
			

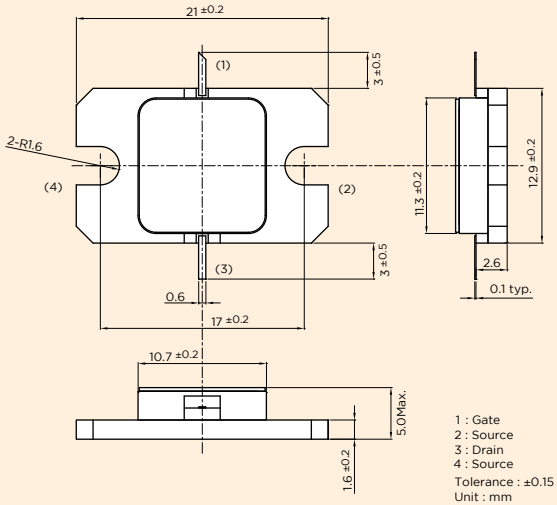
Packages

VU



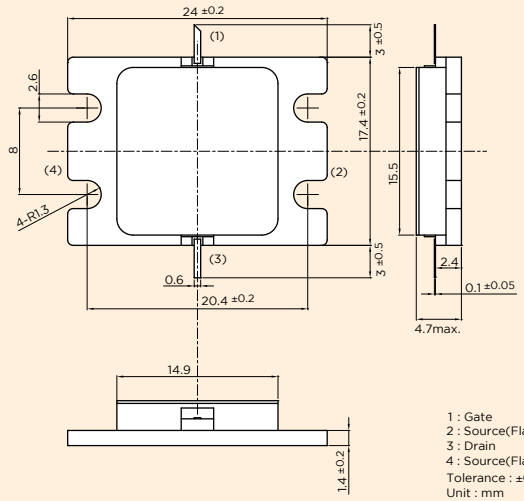
Tolerance : ±0.15
Unit : mm

IBK



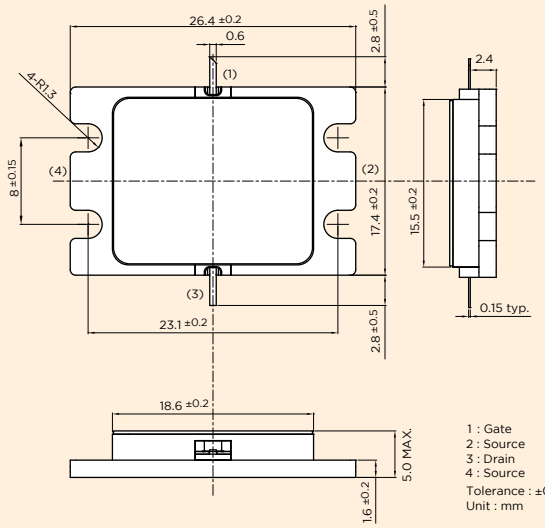
1 : Gate
2 : Source
3 : Drain
4 : Source
Tolerance : ±0.15
Unit : mm

IK



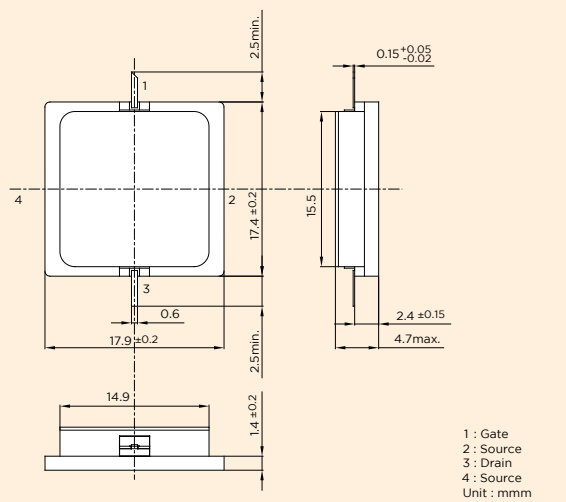
1 : Gate
2 : Source(Flange)
3 : Drain
4 : Source(Flange)
Tolerance : ±0.15
Unit : mm

I2F



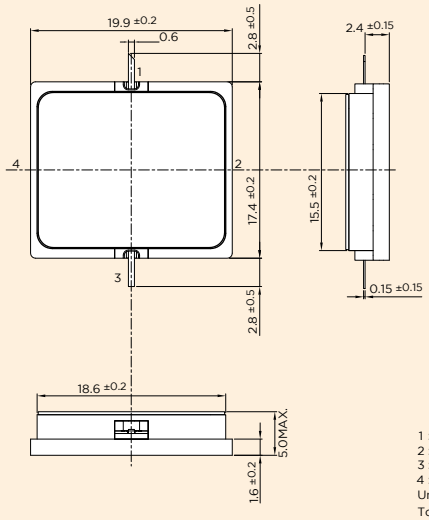
1 : Gate
2 : Source
3 : Drain
4 : Source
Tolerance : ±0.15
Unit : mm

I2K



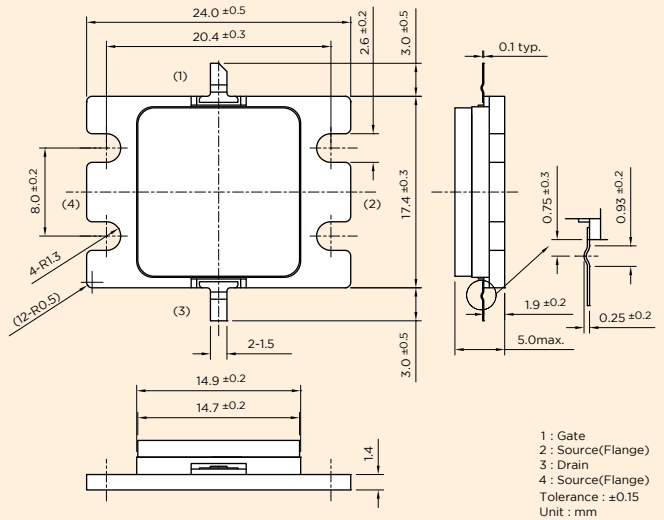
1 : Gate
2 : Source
3 : Drain
4 : Source
Unit : mmm
Tolerance : ±0.15

I2G



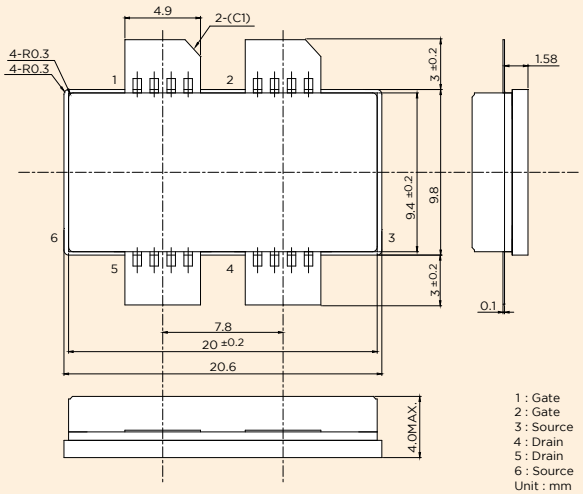
1 : Gate
2 : Source
3 : Drain
4 : Source
Unit : mm
Tolerance : ±0.15

IV



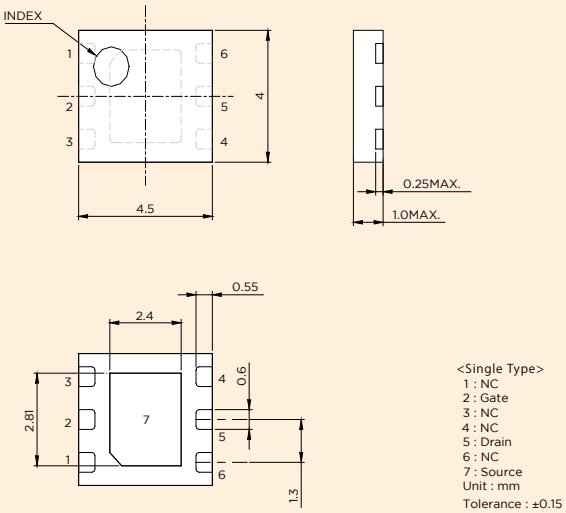
1 : Gate
2 : Source(Flange)
3 : Drain
4 : Source(Flange)
Tolerance : ±0.15
Unit : mm

M2C



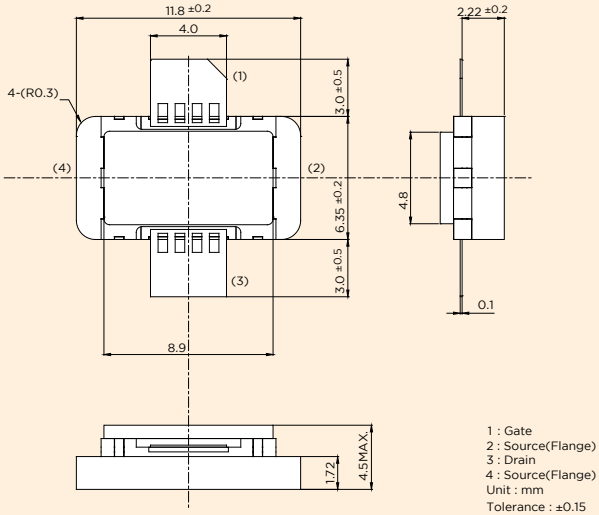
1 : Gate
2 : Gate
3 : Source
4 : Drain
5 : Drain
6 : Source
Unit : mm
Tolerance : ±0.15

Z2K



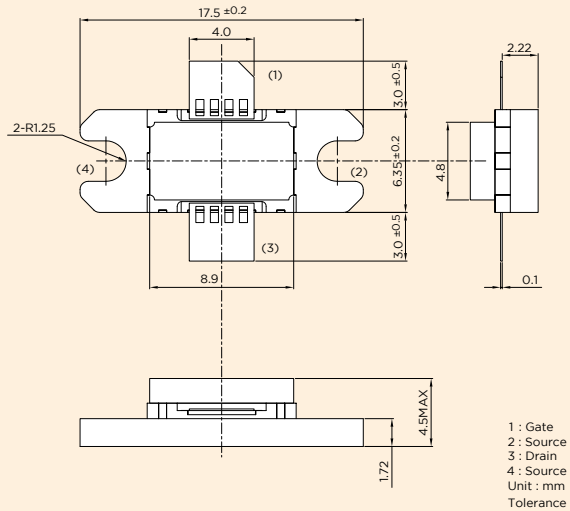
<Single Type>
1 : NC
2 : Gate
3 : NC
4 : NC
5 : Drain
6 : NC
7 : Source
Unit : mm
Tolerance : ±0.15

M1H



1 : Gate
2 : Source(Flange)
3 : Drain
4 : Source(Flange)
Unit : mm
Tolerance : ±0.15

M1R



1 : Gate
2 : Source
3 : Drain
4 : Source
Unit : mm
Tolerance : ±0.15

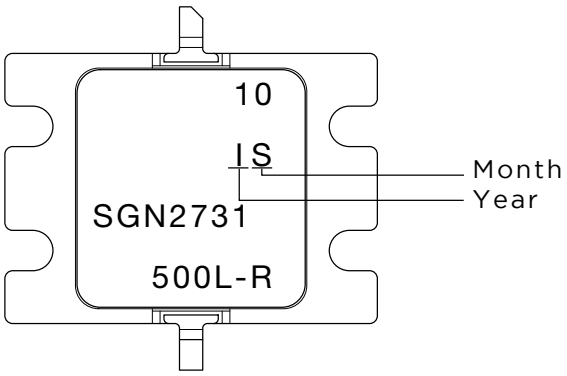
Sealing Rules

■ Year/Month code

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Code	Z	A	B	C	D	E	F	G	H	I	J	K

Note: Code letter is cycling 25 alphabet without Q.

Month	1	2	3	4	5	6	7	8	9	10	11	12
Code	H	M	N	P	R	S	T	U	W	X	Y	Z



Note:
Year/Month code consist of two digit alphabet shown at the above table.
(e.g. “HS” stands for the device is manufactured in year 2026 (Year code “I”) and June (Month code “S”). See the above table.)

Creating Value for Customers

Corporate Quality Assurance

Sumitomo Electric strives to achieve the highest quality and reliability performance on all the products it supplies. This is accomplished through a systemic approach that emphasizes quality at every stage of product development through the manufacturing process. Quality is built into the product from design to wafer fabrication, test, and assembly. Sumitomo Electric has a Quality Management System that is certified to ISO9000 (ISO9001: 2015) and Aerospace Quality Management System JIS Q 9100 : 2016. This system assures customers the highest quality product with long term reliability required for their applications.

Quality Management

ISO9001 : 2015/JIS Q 9001 : 2015
(Certificate Number : JMI-0278)

Registration Date : September 17, 1993
Last Renewal Date : September 15, 2024
Expiry Date : September 14, 2027

JIS Q 9100:2016(AS9100D, prEN9100:2018)
(Certificate Number : JQA-AS0068)

Registration Date : August 20, 2010
Last Renewal Date : September 15, 2024
Expiry Date : September 14, 2027

OASIS Identification Number : 6131093485

Environmental Management

ISO14001:2015 / JIS Q 14001:2025 Yamanashi Plant
(Certificate Number : EC98J1050)

Registration Date : August 25, 1998
Last Renewal Date : August 25, 2025
Expiry Date : August 24, 2028

Scan me to access
the online catalog.

Sumitomo Electric Industries, Ltd.

Japan
Sumitomo Electric Industries, Ltd. (Tokyo)
Akasaka Center Building,1-3-13,
Motoakasaka, Minato-ku,Tokyo
107-8468, Japan

North America
Sumitomo Electric Device Innovations USA
2355 Zanker Road, San Jose,
CA 95131-1138, U.S.A
Tel: +(1)–408-232-9500
www.sei-device.com

Asia
Sumitomo Electric Asia, Ltd.
Suites 5-8, 40/F, Office Tower,
Langham Place, 8 Argyle Street,
Mongkok, Kowloon, Hong Kong
Tel: +(852)-2830-7466

Europe
Sumitomo Electric Europe, Ltd.
220 Centennial Park,
Centennial Avenue, Elstree,
Herts, WD6 3SL, UK.
Tel: +(44)-208-953-8118
www.sumielectric.com

(Italy Branch)
Viale Piero e Alberto Pirelli 6, 20126
Milano, Italy
Tel: +(39)-024-963-8601

⚠ ATTENTION

Information in this document is subject to change without notice.

EQ01(2026 .06)