

# GN04022N

## GaAs N-Channel IC

For W-CDMA

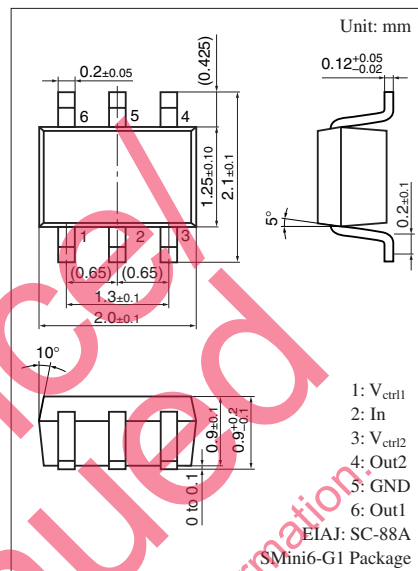
For high-frequency and high-power SPDT switch

### ■ Features

- Low insertion
- High isolation
- S-Mini type 6-pin package

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Supply voltage	$V_{DD}$	8	V
Control current	$V_{ctrl(H)} - V_{ctrl(L)}$	+6	V
Maximum input power	$P_{IN}$	35	dBm
Operating ambient temperature	$T_{opr}$	-30 to +90	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +120	$^\circ\text{C}$



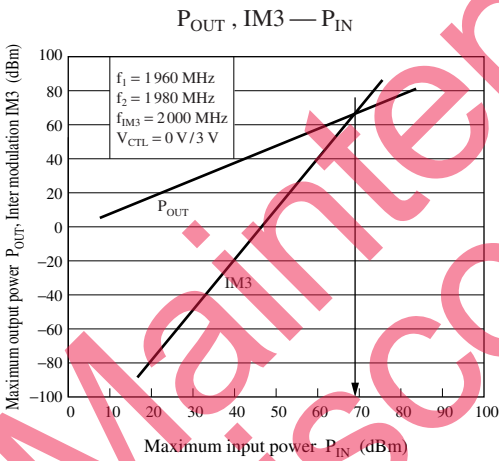
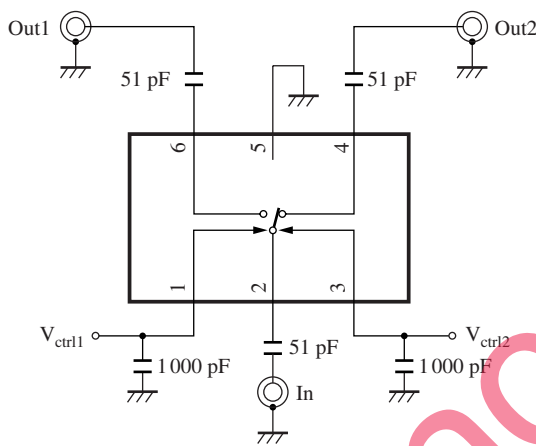
Marking Symbol: LV

### ■ Electrical Characteristics $V_{ctrl(L)} = 0\text{ V}$ , $V_{ctrl(H)} = 3.0\text{ V}$ , $f = 1920\text{ MHz to }2170\text{ MHz}$ , $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Insertion loss	IL	In-Out1, $P_{IN} = 26\text{ dBm}$		0.25	0.45	dB
		In-Out2, $P_{IN} = 26\text{ dBm}$		0.25	0.45	
Isolation	ISO	In-Out1 (In-Out2 on)	21	23		dB
		In-Out2 (In-Out1 on)	21	23		
Voltage standing wave ratio *	VSWR	In-Out1, 2		1.10	1.30	dB
Input 0.1 dB Compression	$P_{IN(P0.1\text{ dB})}$	$V_{ctrl(H)} = 3\text{ V}$	30	31		dBm
Input 1 dB Compression *	$P_{IN(P1.0\text{ dB})}$	$V_{ctrl(H)} = 3\text{ V}$	32	33		dBm
Control current	$I_{ctrl}$	In-Out1, 2		1	9	$\mu\text{A}$

Note) \*: Designed specification

■ Measurement Circuit



# Caution for Safety

 **DANGER**

## ■ This product contains Gallium Arsenide (GaAs).

GaAs powder and vapor are hazardous to human health if inhaled or ingested. Do not burn, destroy, cut, cleave off, or chemically dissolve the product. Follow related laws and ordinances for disposal. The product should be excluded from general industrial waste or household garbage.

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