

GN04005

GaAs N-Channel IC

For high-frequency medium-power SPDT switch

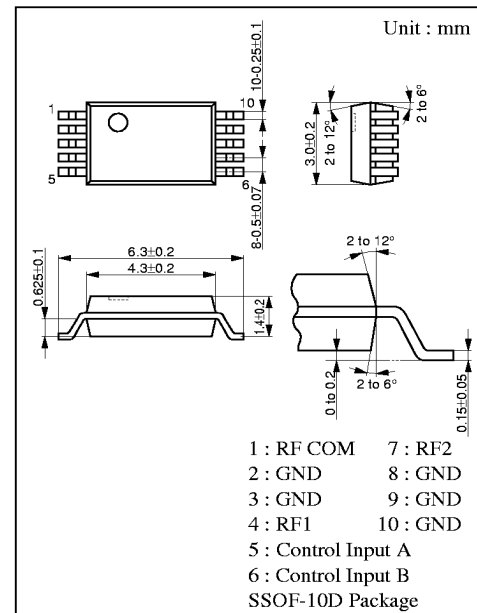
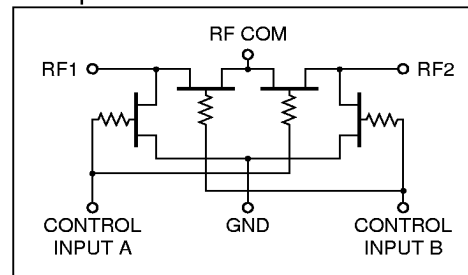
■ Features

- Low insertion loss : LOSS= 0.6dB
- High isolation : ISO= 25dB
- Small package

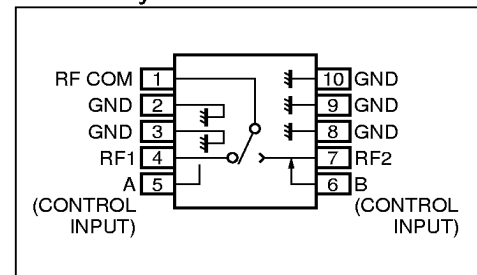
■ Absolute Maximum Ratings (Ta= 25°C)

Parameter	Symbol	Rating	Unit
Max input power	P_{in}	34	dBm
Max control voltage	V_{CON}	-10	V
Channel temperature	T_{ch}	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

■ Equivalent Circuit



■ Pin Layout



■ Electrical Characteristics (Ta = 25°C)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Insertion loss	LOSS	$V_{CON} = -5V$, $f = 0.1$ to $2GHz$		0.6	1	dB
Isolation	ISO	$V_{CON} = -5V$, $f = 0.1$ to $2GHz$	20	25		dB
VSWR	VSWR	$V_{CON} = -5V$, $f = 0.1$ to $2GHz$		1.5		
1dB compression	P_{1dB}	$V_{CON} = -5V$, $f = 0.1$ to $2GHz$		27		dBm
Control current	I_{CON}	$V_{CON} = -5V$, $f = 0.1$ to $2GHz$		25		μA
2nd harmonics level	P2	$V_{CON} = -5V$, $f = 0.1$ to $2GHz$ $P_{in} = 22dBm$		-55		dBc
3rd harmonics level	P3			-55		dBc

■ Truth Table (High : -5V, Low : 0V)

A	B	RFCOM-RF1	RFCOM-RF2
HIGH	LOW	ON	OFF
LOW	HIGH	OFF	ON
HIGH	HIGH	OFF	OFF

Power Handling Characteristics

