GN04005

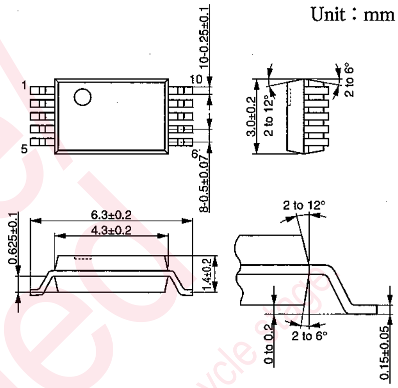
GaAs N-Channel IC

For high-frequency medium-power SPDT switch

Features

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

Unit : mm

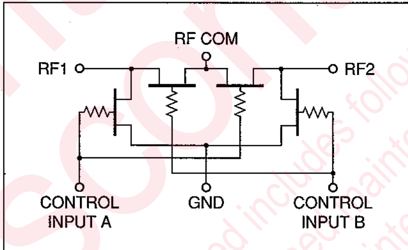


1 : RF COM 7 : RF2
2 : GND 8 : GND
3 : GND 9 : GND
4 : RF1 10 : GND
5 : Control Input A
6 : Control Input B
SSOF-10D Package

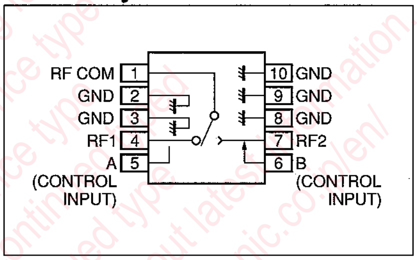
Absolute Maximum Ratings (Ta=25℃)

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

Equivalent Circuit



Pin Layout



Electrical Characteristics (Ta=25℃)

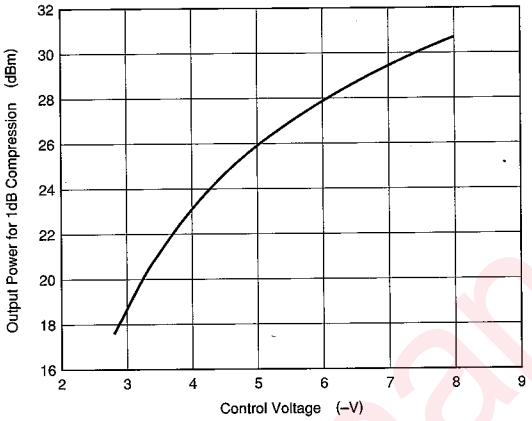
Parameter	Symbol	Condition	Min	Typ	Max	Unit
Insertion loss	LOSS	V_{CON}=−5V, f=0.1 to 2GHz		0.6	1	dB
Isolation	ISO	V_{CON}=−5V, f=0.1 to 2GHz	20	25		dB
VSWR	VSWR	V_{CON}=−5V, f=0.1 to 2GHz		1.5		
1dB compression	P_{1dB}	V_{CON}=−5V, f=0.1 to 2GHz		27		dBm
Control current	I_{CON}	V_{CON}=−5V, f=0.1 to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

GaAs MMIC

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



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