

GN1021

GaAs N Channel MES Type IC

For SHF band IF amplification and UHF band general-purpose amplification

■ Features

- Bias resistor built-in
- Low noise
- High gain

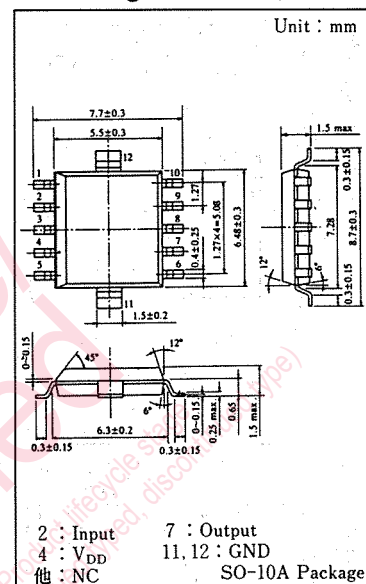
■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Power Supply Voltage	V _{DD}	15	V
Circuit Current	I _{DD}	80	mA
Power Dissipation	P _D	500	mW
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

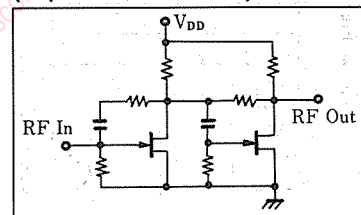
■ Electrical Characteristics (Ta=25°C)

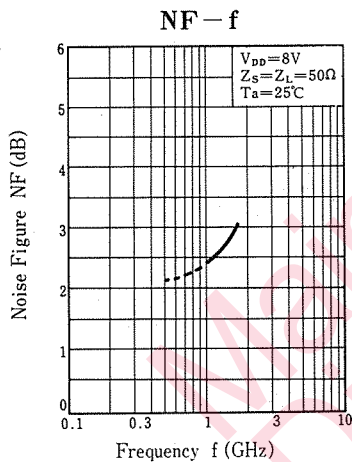
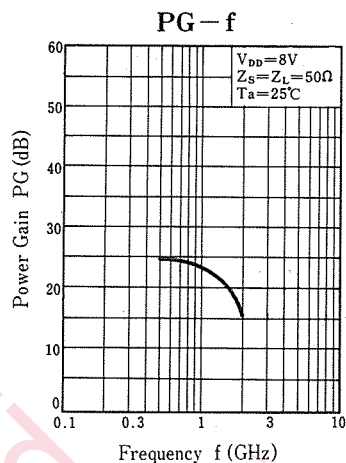
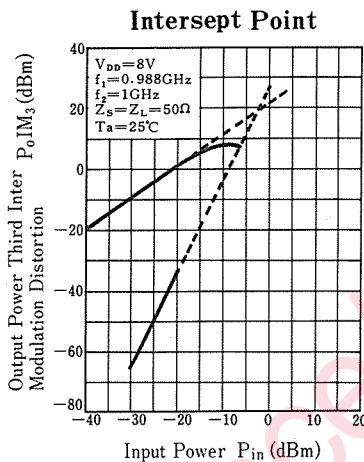
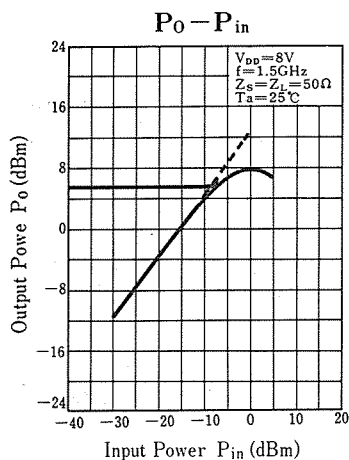
Item	Symbol	Condition	min.	typ.	max.	Unit
Circuit Current	I _{DD}	V _{DD} =8V, Z _S =Z _L =50Ω	20	40	70	mA
Power Gain	PG	V _{DD} =8V, f=1.5GHz, Z _S =Z _L =50Ω	16	19	22	dB
Noise Figure	NF	V _{DD} =8V, f=1.5GHz, Z _S =Z _L =50Ω		3	4	dB
Isolation	I _{SO}	V _{DD} =8V, f=1.5GHz, Z _S =Z _L =50Ω	24	35		dB
1 _{dB} Compression Output Level	P _O	V _{DD} =8V, f=1.5GHz, Z _S =Z _L =50Ω		10		dBm
Input V _{SWR}	V _{SWRI}	V _{DD} =8V, f=0.9~1.5GHz, Z _S =Z _L =50Ω		2.5	3.5	
Output V _{SWR}	V _{SWRO}	V _{DD} =8V, f=0.9~1.5GHz, Z _S =Z _L =50Ω		2	3	
Tertiary Distortion	IM ₃	V _{DD} =8V, Z _S =Z _L =50Ω, f ₁ =0.988GHz, f ₂ =1GHz Intercept point		18		dBm

■ Package Dimensions



(Equivalent Circuit)





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