

GN1043 (Tentative)

GaAs N Channel MES Type IC

For UHF/VHF band wide bandwidth low-noise RF amplification

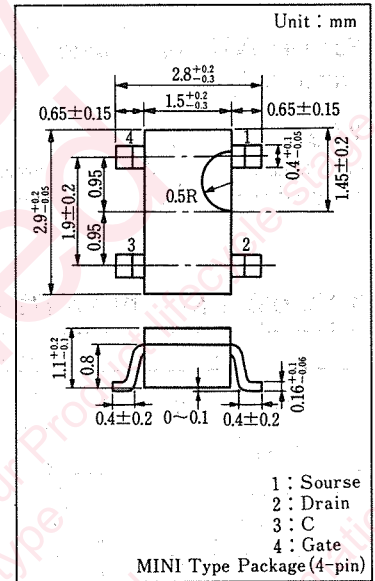
■ Features

- Excellent tertiary distortion characteristics

■ Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Power Supply Voltage	V _{DS}	6	V
	V _{GS}	-4	V
Drain Current	I _D	60	mA
Gate Current (DC)	I _G	3	mA
Power Dissipation	P _D	200	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

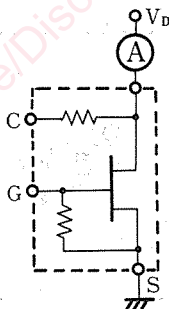
■ Package Dimensions



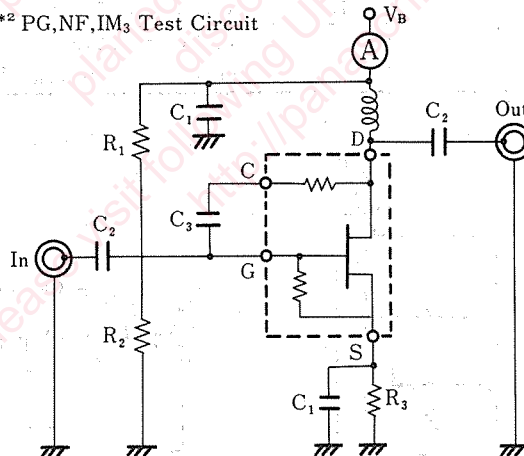
■ Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Drain Current	I _{DD} *1*3	V _{DS} =3V	28	45	65	mA
Power Gain	PG *2	V _B =9V, f=800MHz	7	9	11	dB
Noise Figure	NF *2	V _B =9V, f=800MHz		2.5	3.5	dB
Tertiary Distortion	IM ₃ *2	V _B =9V, P _{out} =0dBm f ₁ =600MHz, f ₂ =650MHz	58	62		dB

*1 I_{DD} Test Circuit



*2 PG,NF,IM₃ Test Circuit



- V_B : 9V
- C₁ : 1000pF
- C₂ : 200pF
- C₃ : 27pF
- R₁ : 10kΩ
- R₂ : 18kΩ
- R₃ : 220Ω

*3 I_{DD} Ranking

Rank	P	Q
I _{DD} (mA)	28~45	40~65

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