

GN1015

GaAs N Channel MES Type IC

For high-output high-gain amplification

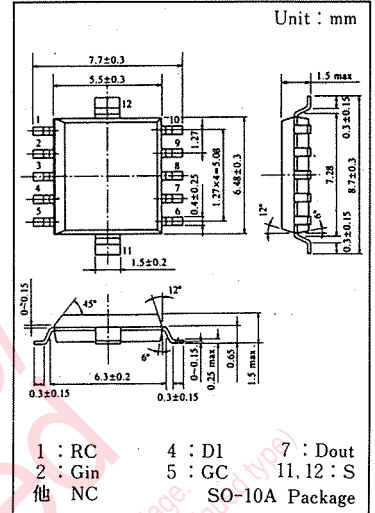
Features

- With bandwidth control terminal
- Low noise
- High gain
- Low-voltage operation

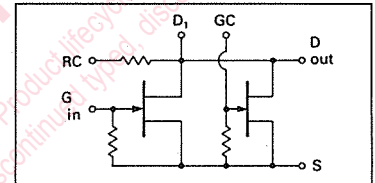
Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Power Supply Voltage	V _{DS}	6	V
Power Supply Voltage	V _{GS}	-4	V
Drain Current	I _D	120	mA
Gate Current (DC)	I _G	3	mA
Power Dissipation	P _D	500	mW
Channel Temperature	T _{ch}	150	°C
Storage Temperature	T _{stg}	-55 ~ +150	°C

Package Dimensions



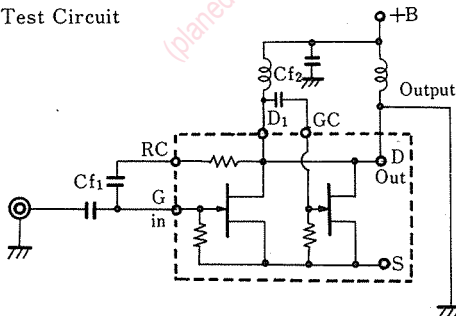
(Equivalent Circuit)



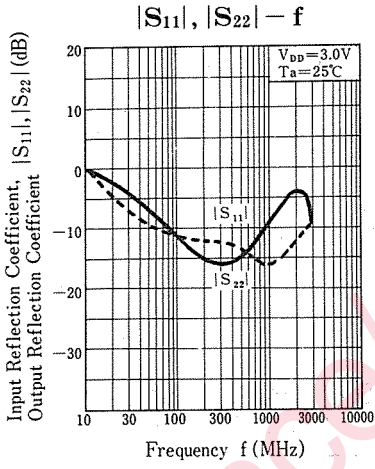
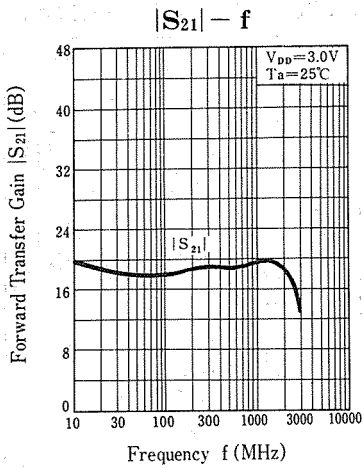
Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	min.	typ.	max.	Unit
Drain Current	I _{DD}	V _{DS} =3V	30	60	100	mA
Noise Figure	NF *	V _{DS} =3V, f=0.5GHz		2	3	dB
		V _{DS} =3V, f=1.8GHz		2	3	dB
Power Gain	PG *	V _{DS} =3V, f=0.5GHz	18	21	26	dB
		V _{DS} =3V, f=1.8GHz	16	19	23	dB
I _{dB} Compression Output Level	P _O *	V _{DS} =3V, f=0.5GHz	8	15		dBm
		V _{DS} =3V, f=1.8GHz	8	15		dBm
Isolation	S ₁₂	V _{DS} =3V, f=1.8GHz	20	24		dB
Input Return-Loss	S ₁₁	V _{DS} =3V, f=1.8GHz	6	14		dB

* Test Circuit



Cf₁ = 27pF
Cf₂ = 1000pF



Maintenance/Discontinued

Maintenance/Discontinued includes following four Product lifecycle stage.
(planned maintenance type, maintenance type, planned discontinued type, discontinued type)

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