

# 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

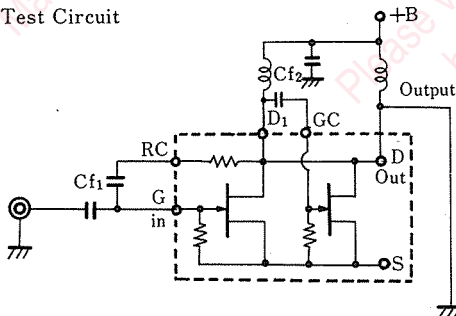
### Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Value	Unit
Power Supply Voltage	V <sub>DS</sub>	6	V
Power Supply Voltage	V <sub>GS</sub>	-4	V
Drain Current	I <sub>D</sub>	120	mA
Gate Current (DC)	I <sub>G</sub>	3	mA
Power Dissipation	P <sub>D</sub>	500	mW
Channel Temperature	T <sub>ch</sub>	150	°C
Storage Temperature	T <sub>stg</sub>	-55 ~ +150	°C

### Electrical Characteristics (Ta=25°C)

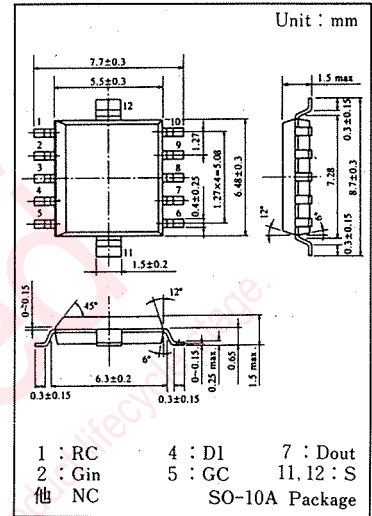
Item	Symbol	Condition	min.	typ.	max.	Unit
Drain Current	I <sub>DD</sub>	V <sub>DS</sub> =3V	30	60	100	mA
Noise Figure	NF*	V <sub>DS</sub> =3V, f=0.5GHz		2	3	dB
		V <sub>DS</sub> =3V, f=1.8GHz		2	3	dB
Power Gain	PG*	V <sub>DS</sub> =3V, f=0.5GHz	18	21	26	dB
		V <sub>DS</sub> =3V, f=1.8GHz	16	19	23	dB
I <sub>dB</sub> Compression Output Level	P <sub>0</sub> *	V <sub>DS</sub> =3V, f=0.5GHz	8	15		dBm
		V <sub>DS</sub> =3V, f=1.8GHz	8	15		dBm
Isolation	S <sub>12</sub>	V <sub>DS</sub> =3V, f=1.8GHz	20	24		dB
Input Return-Loss	S <sub>11</sub>	V <sub>DS</sub> =3V, f=1.8GHz	6	14		dB

\* Test Circuit

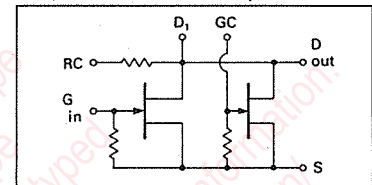


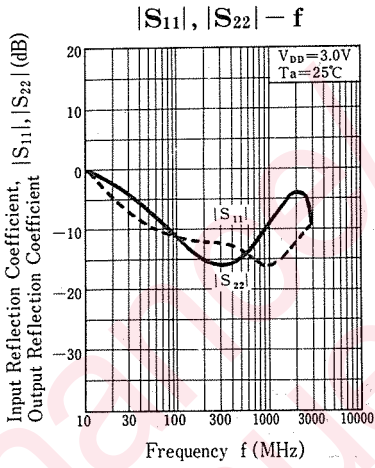
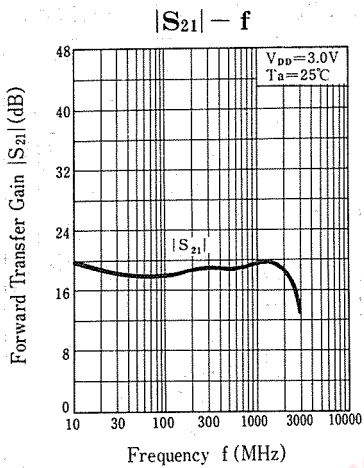
Cf1 = 27pF  
Cf2 = 1000pF

### Package Dimensions



### (Equivalent Circuit)





Maintenance/Discontinued

includes following four Product lifecycle stage:

- planned maintenance type
- maintenance type
- planned discontinued type
- discontinued type

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