

DESCRIPTION

MGF7114C is a GaAs monolithic microwave integrated circuit for use in 800MHz band power amplifiers.

FEATURES

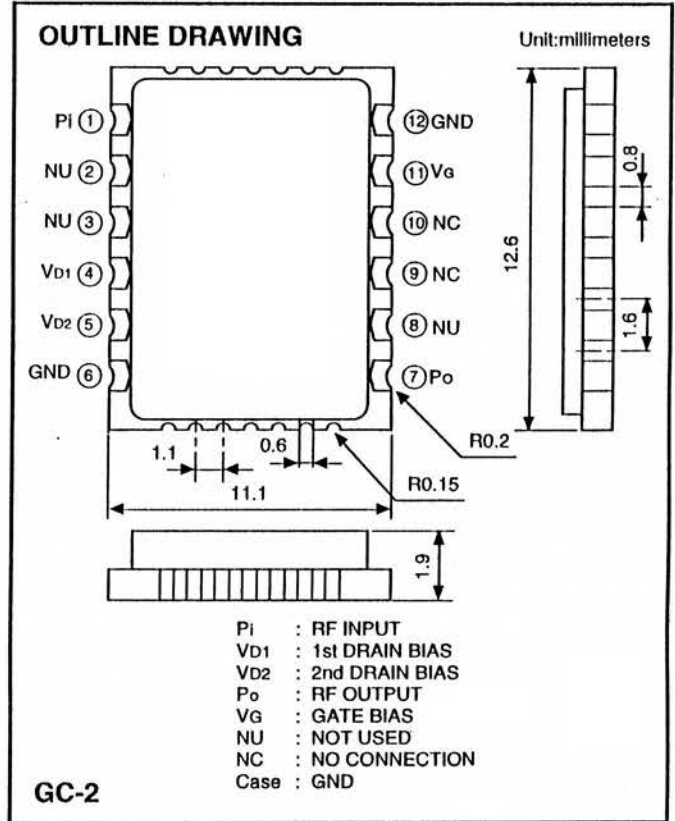
- High output power
Po=30.5dBm(Typ.)@824 to 849MHz
- High efficiency
 η t=60%(Typ.)@Po=29.8dBm,Vd1 control
- Small size
12.6×11.1×1.9mm
- Surface mount package
- 2 Stage Amplifier

APPLICATION

800MHz band handheld phone

QUALITY GRADE

- GG



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Rating	Unit
Vd1,Vd2	Drain supply voltage	9	V
Vg	Gate supply voltage	-5	V
Pi	Input power	12	dBm
Tc(op)	Operating case temperature	-30 to +90	°C
Tsig	Storage temperature	-30 to +100	°C

- Per la dissipazione fornire una adeguata superficie di c.s. in rame
- Per il bias utilizzare i soliti C.I. ICL 7660 per il negativo di gate

ELECTRICAL CHARACTERISTICS(Ta=25°C)

Symbol	Parameter	Test conditions (Note1)	Limits			Unit
			Min	Typ	Max	
f	Frequency		872	—	905	MHz
Po	Output power	Vd1 =4.7V,Vd2=4.7V Pi=7dBm	30.0	30.5	—	dBm
Idt	Total drain current		—	400	450	mA
2SP	2nd harmonics	Vd1=Cont.,Vd2 =4.7V, Pi=7dBm	—	—	-25	dBc
3SP	3rd harmonics	Po=29.8dBm	—	—	-25	dBc
p	Input VSWR		—	—	3	—
Vd1	Power control voltage	Vd2 =4.7V,Pi=7dBm,Po=29.8dBm,Id1 ≤100mA	0	—	4.7	V
Id1	Power control current	Vd2 =4.7V,Pi=7dBm,Po=29.8dBm,Vd1 ≤4.7V	0	—	100	mA

Note1 : Zs=Zl=50Ω,Vg=-3.0V