BA01203

Specifications are subject to change without notice.

GaAs HBT HYBRID IC

DESCRIPTION

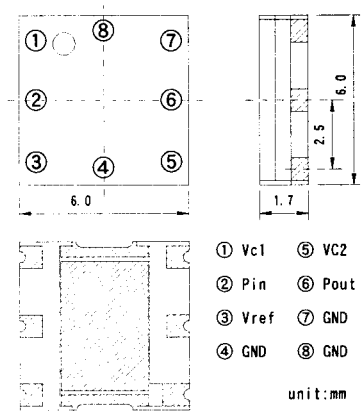
BA01203 is GaAs RF amplifier designed for **CDMA/AMPS** handheld-phone.

FEATURES

High gain Gp=28dB
Single supply voltage Vcc=3.2V
CDMA-mode
High power Po=28.5dBm
High efficiency Ict=580mA(38%)
AMPS-mode
High power Po=31dBm(@Vcc=3.2V)
High efficiency Ict=820mA(@Po=31dBm,Vcc=3.2V)
Internal input and output matching
Small size: 6x6mm^2

OUTLINE DRAWING

Unit : millimeters



APPLICATION

・CDMA/AMPS 824-849MHz handset.

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

Symbol	Parameter	Condition	Ratings	Unit
Vcc	Corrector voltage		5	V
Pin	Input Power	ZG=ZL=50Ω	5	dBm
Tc(op)	Operating case temp.		-30～+95	°C
Tstg	Storage temp.		-30～+125	°C

Each maximum rating is guaranteed independently.

ELECTRICAL CHARACTERISTICS (Ta=25°C, Recommendation of operation voltage=3.2-4.2V)

Symbol	Parameter	Condition Note1	Limits			Unit
			MIN	TYP	MAX	
freq	Frequency(TDMA/AMPS)	-----	824		849	MHz
Iq	Quiescent Current	No-RF input Vc=3.2V,Vref=3.0V	--	75	--	mA
Pin	Input Power	CDMA-mode(note2)	--	1	--	dBm
Ict	Total Corrector Current	Po=28.5dBm	--	580	--	mA
ACP	Adjacent channel power(±885KHz)	Vc1=Vc2=3.2V,	--	--	-29	dBc
NACP	Adjacent channel power(±1.98MHz)	Vref=3.0V	--	--	-42	dBc
Pin	Input Power	AMPS-mode,Po=31dBm	--	3	--	dBm
Ict	Total Corrector Current	Vc1=Vc2=3.2V	--	820	--	mA
2sp/3sp	2nd/3rd Harmonics	Vref=3.0V	--	--	-30	dBc
Rxnoise	Noise in RX band		--	-140	--	dBc

Note1: $Z_G=Z_L=50(\Omega)$
Note2: CDMA modulated signal based on IS-95 STD.