

Preliminary

Specifications are subject to change without notice.

GaAs FET HYBRID IC

DESCRIPTION

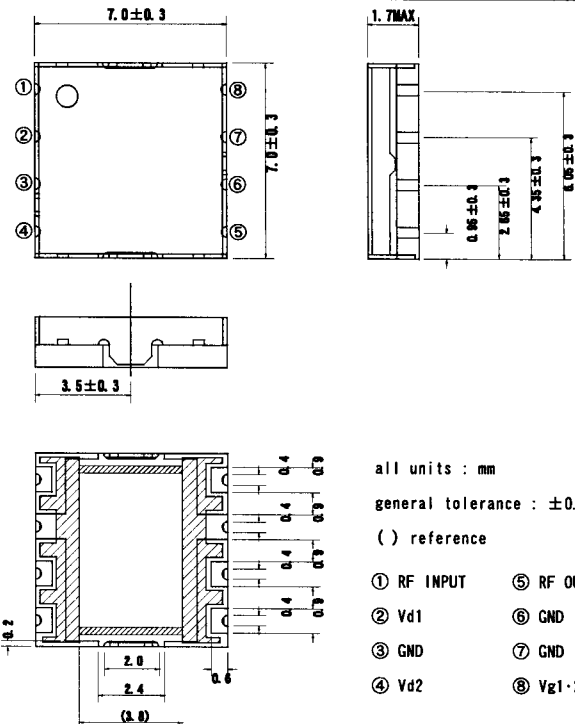
FA01229 is RF Hybrid IC designed for 1.5GHz band small size handheld radio.

FEATURES

- Low voltage 3.5V
- High gain 27dB
- High efficiency 56%
- High power 29.8dBm

APPLICATION

PDC1500



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Condition	Tc	Ratings	Unit
VD	Drain voltage	$P_o \leq 29.8\text{dBm}$	25°C	4.5	V
Pin	Input Power	$Z_G = Z_L = 50\Omega$	25°C	12	dBm
Tc(op)	Operation case temp.	--	--	-20 ~ +85	°C
Tstg	Storage temp.	--	--	-30 ~ +90	°C

Note: Each maximum ratings is guaranteed independently and duty=1/3 operation. T=20 msec

ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter	Condition	Limits			Unit
			MIN	TYP	MAX	
f	Frequency	--	1429	--	1453	MHz
Pin	Input Power	$P_o = 29.8\text{dBm}$	--	3	6	dBm
Idt	Total Drain Current	$V_{D1} = V_{D2} = 3.5\text{V}$	--	480	--	mA
pin	Return Loss	$V_{G1,2} = -2.50\text{V}$	--	--	-6	dB
ACP50	±50kHz adjacent channel power	$Z_G = Z_L = 50\Omega$	--	-50	-48	dBc
ACP100	±100kHz adjacent channel power	($\pi/4$ DQPSK)	--	-65	-62	dBc
2fo	2nd Harmonics	ditto	--	--	-40	dBc
3fo	3rd Harmonics	(CW)	--	--	-40	dBc

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