

**DESCRIPTION**

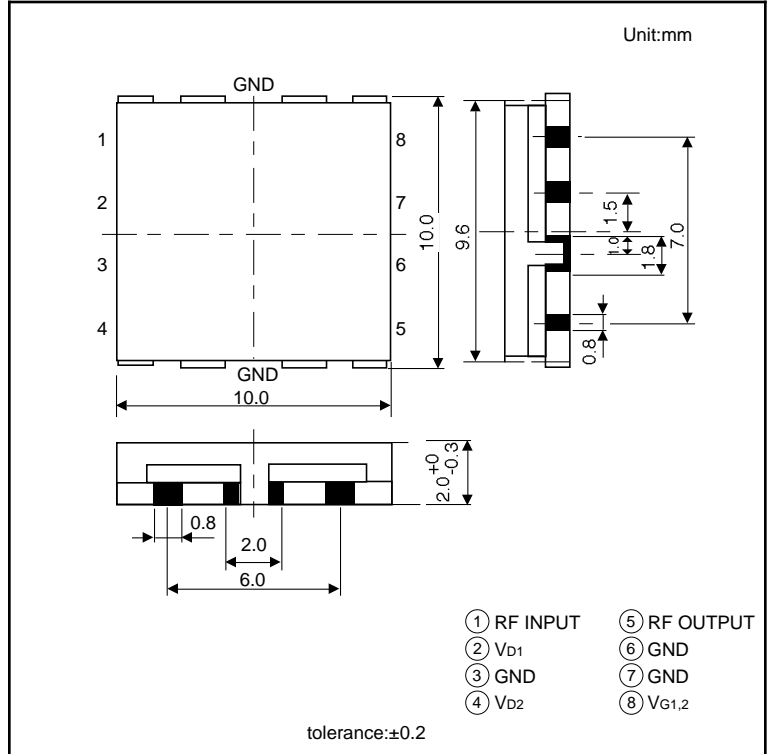
FA01220A is RF Hybrid IC designed for 1.5GHz band small size handheld radio.

**FEATURES**

- Low voltage 3.5V
- High gain 20.5B
- High efficiency 50%
- High power 30.5dBm

**APPLICATION**

PDC1.5GHz



**ABSOLUTE MAXIMUM RATINGS**

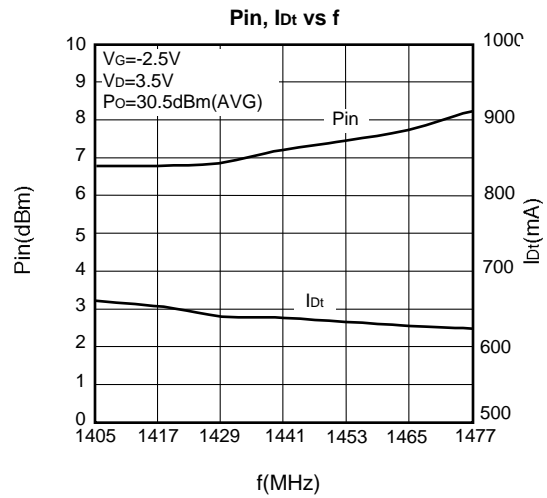
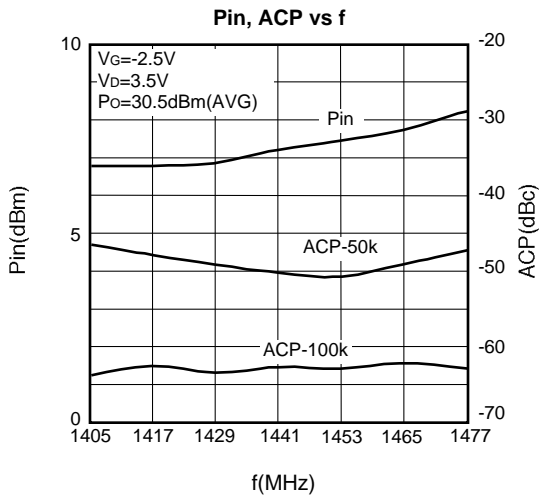
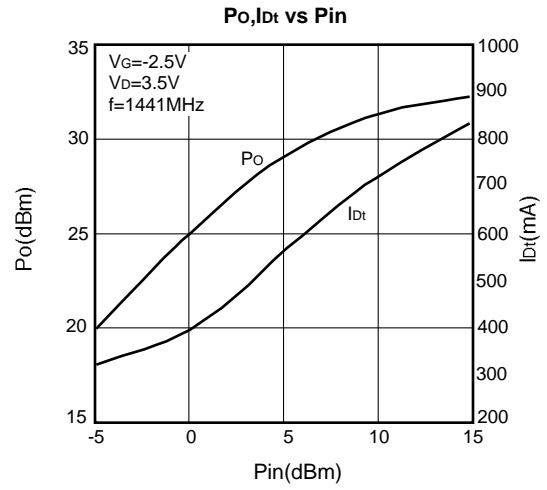
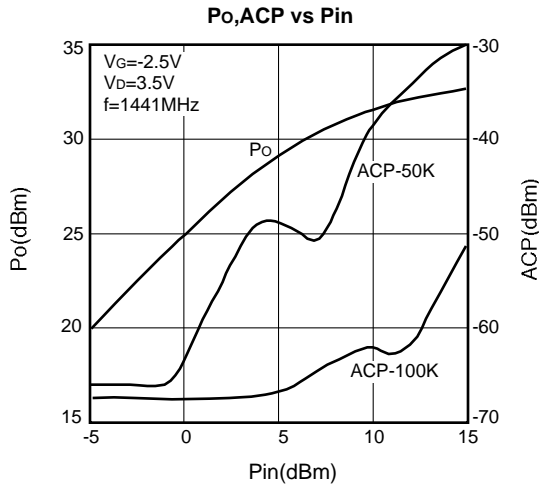
Symbol	Parameter	Condition	Ratings	Unit
V <sub>D</sub>	Drain voltage	T <sub>c</sub> =25°C, P <sub>o</sub> 30.5dBm	4.5	V
P <sub>in</sub>	Input power	T <sub>c</sub> =25°C, Z <sub>G</sub> =Z <sub>L</sub> =50	15	dBm
T <sub>c(op)</sub>	Operating case temp		-20 to +85	°C
T <sub>stg</sub>	Storage temp		-30 to +90	°C

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

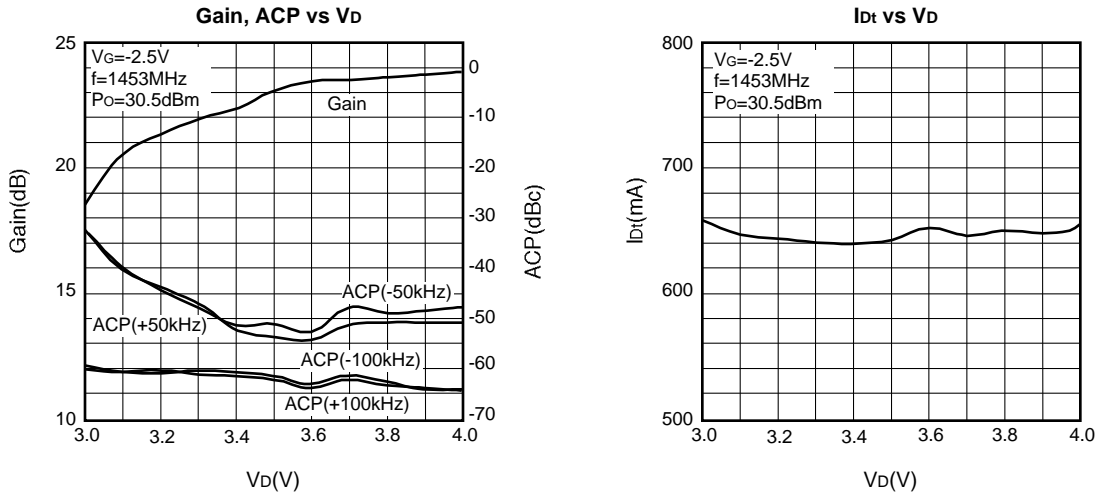
**ELECTRICAL CHARACTERISTICS**(T<sub>a</sub>=25°C)

Symbol	Parameter	Test conditions	Limits			Unit
			Min	Typ	Max	
f	Frequency		1429	-	1453	MHz
P <sub>in</sub>	Input power	P <sub>o</sub> =30.5dBm	-	(7)	10	dBm
I <sub>dt</sub>	Total drain current	V <sub>D1</sub> =V <sub>D2</sub> =3.5V	-	640	720	mA
in	Return loss	V <sub>G1,2</sub> =-2.5V	-	-	-6	dB
ACP50	±50kHz adjacent channel power	Z <sub>G</sub> =Z <sub>L</sub> =50 ( /4DQPSK)	-	-	-47	dBc
ACP100	±100kHz adjacent channel power		-	-	-62	dBc
2f <sub>o</sub>	2nd harmonics	Ditto	-	-	-30	dBc
3f <sub>o</sub>	3rd harmonics	(CW)	-	-	-30	dBc

**TYPICAL CHARACTERISTICS 1**



**TYPICAL CHARACTERISTICS 2**



**EQUIVALENT CIRCUIT**

