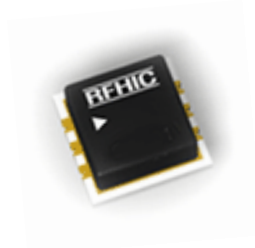


Product Features

- GaAs MESFET chip on board
- No matching circuit needed
- High IP3
- Surface Mount Hybrid Type & Reel Packing
- Small Size

Application

- PCS Repeater
- RF Sub-Systems
- Base Station



Description

This Linear Amplifier family is a low noise amplifier with high gain and low current. It is one of the smallest matched Amplifiers.

This family of Linear Amplifier has superior performance comes with a modest price tag

ELECTRICAL CHARACTERISTICS

Absolute Minimum and Maximum Ratings

PARAMETER	UNIT	MIN	MAX
Device Voltage	VDC		+8
RF Input Power	dBm		+7
Storage Temperature	°C	-40	+125
Channel Temperature	°C	-40	+85

Operating Ranges

PARAMETER	UNIT	MIN	TYP	MAX
Operating Frequency	MHz	1700	-	2000
Device Voltage	VDC	-	+5	+8
Case Temperature	°C	-40	-	+85

Electrical Specifications

(Ta=+25°C, V_{DD}=+5V, F=1810MHz)

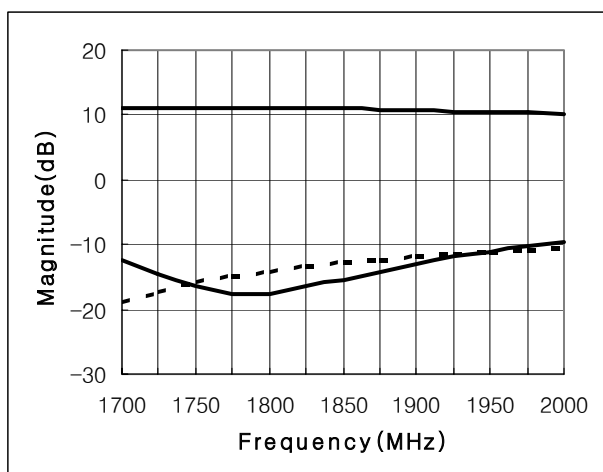
PARAMETER	UNIT	MIN	TYP	MAX
Gain	dB		11	-
Input Return Loss	dB	-	-17	-
Output Return Loss	dB	-	-14	-
Output IP3	dBm	+38	+43	-
1dB Compression Point	dBm	-	+22	-
Noise Figure	dB	-	2.9	-
DC Current	mA		140	
Supply Voltage	VDC	-	+5V	
Thermal Resistance(Rth)	°C/W	-	-	20

OIP3 is measured with two tones, at an output power of 10dBm/tone separated by 1MHz

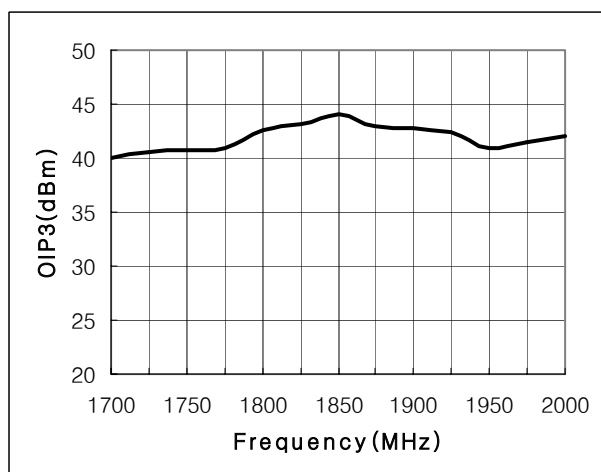
Performance Charts ($V_d=5V$, $I_d=140mA$, $T_c=25^\circ C$)

Frequency	MHz	1700	1750	1800	1850	1900	1950	2000
Gain	dB	11	11	11	10.9	10.6	10.4	10
S11	dB	-12	-16	-17	-15	-13	-11	-10
S22	dB	-19	-16	-14	-13	-12	-11	-10
OIP3	dBm	40	41	43	44	43	41	42
P1dB	dBm	21.8	22	22.2	22.2	22.3	22.3	22.4
Noise Figure	dB	3.2	3	2.9	2.85	2.82	2.88	2.73

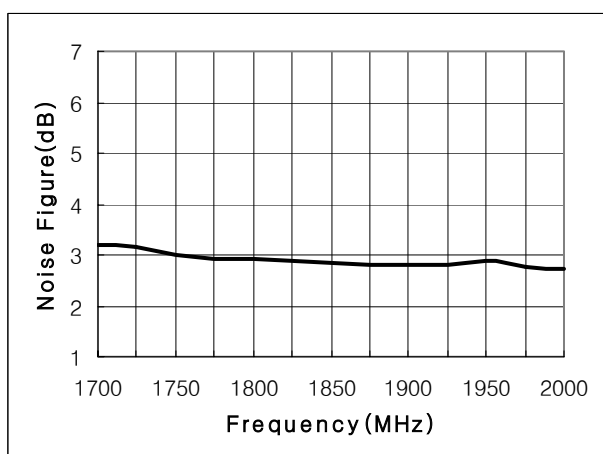
S-Parameter vs. Frequency



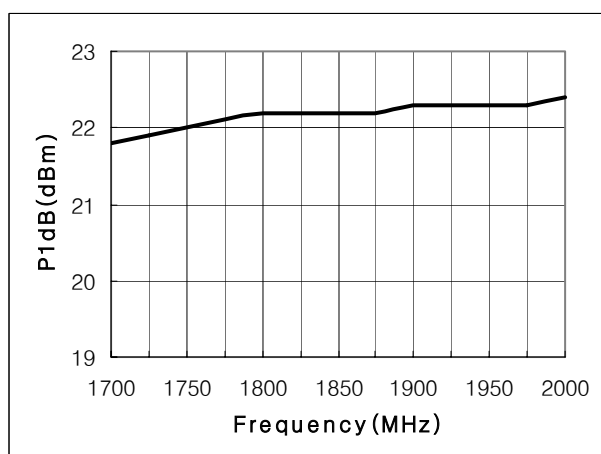
OIP3 vs. Frequency



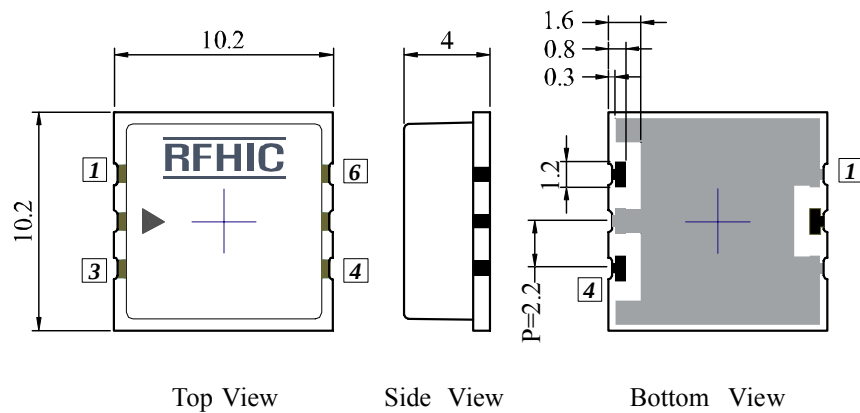
Noise Figure vs. Frequency



P1dB vs. Frequency



Dimensions in mm



No.	Function
1,3,4	Ground
2	Input
5	Output
6	Vdc

Recommended Pattern

