Features

Freq: 32～37GHz

Gain: 21dB

Output Power for 1 dB Compression: 9dBm

Supply Voltage: +5V

Supply Current: 28mA

Chip Size:1.67mm×0.9mm×0.1mm

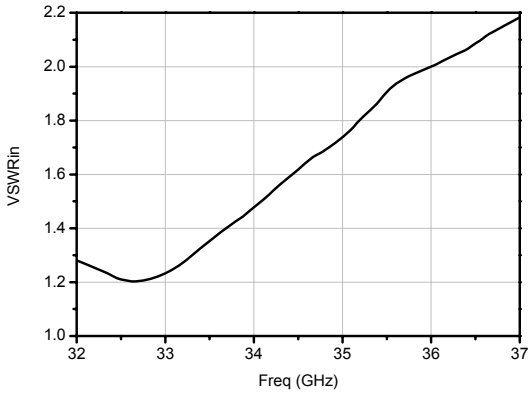
General Description

The HG128F is a GaAs pHEMT MMIC Driver Amplifier that is operating from 32 to 37 GHz. The amplifier has been optimized to provide 21 dB gain, and 9 dBm output power for 1dB compression.

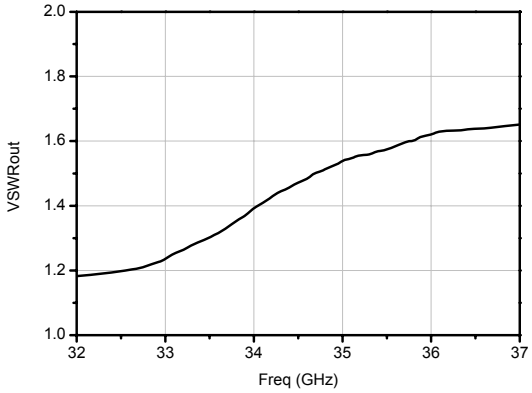
Electrical Specifications(T_A=25 ℃,Vdd= +5V).

Parameter	Min.	Typ.	Max.
Freq(GHz)		32～37	
Gain (dB)	—	21	—
Gain Flatness (dB)	—	±0.5	—
Input Return Loss (dB)	—	1.8	—
Output Return Loss (dB)	—	1.4	—
Output Power for 1 dB Compression(dBm)	—	9	—

Input VSWR



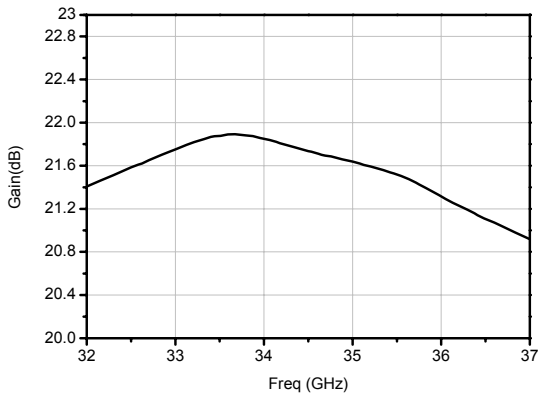
Output VSWR



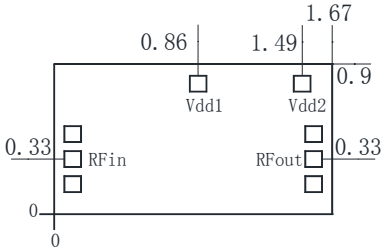
Freq(GHz)	32	35	37
P-1(dBm)	16.9	20.8	7.93

Measured Performance

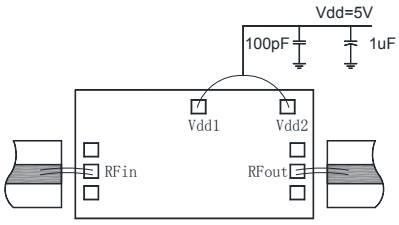
Gain



Outline Drawing (mm)



Assembly Diagram



Absolute Maximum Ratings

Supply Voltage	+5.5V
RF Input Power	+20dBm
Operating Temperature	-55℃～125℃
Storage Temperature	-65℃～150℃

Notes:

1. The chip should be stored in a dry and nitrogen environment, and used in a clean environment.
2. GaAs material is brittle, can not touch the surface of the chip, must be careful when using.
3. The chip is welding with conductive adhesive or alloy (alloy temperature should not exceed 300℃, and no more than 30 sec.), and should make it fully grounded.
4.The chip microwave port and substrate gap is not exceeding 0.05mm, with Φ25μm double gold wire bonding, suggested length of gold wire 250～400μm.
5.Chip microwave port with a DC blocking capacitor.
6.The chip is sensitive to static electricity, and should be protected against static electricity during storage and use.