

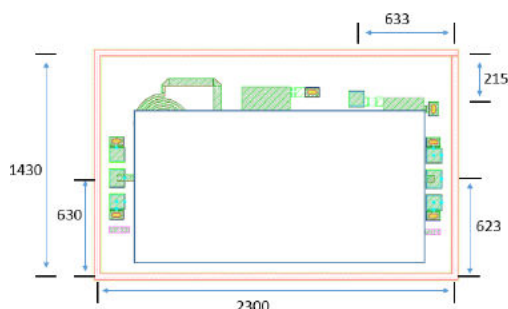
## General Description

MWL019A&B is a low noise amplifier designed and manufactured using GaAs pHEMT process. This low-noise amplifier only needs +5V voltage supply, the normal working current is 26mA, the working frequency can cover 2.7GHz to 3.5GHz, providing 33dB small signal gain, noise figure is 0.67dB, output 1dB compression point can reaches +11.5dBm

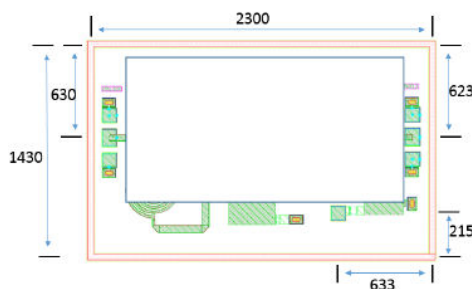
## Features

- Noise Figure: 0.67dB
- Gain: 33dB;
- Output P1dB: +11.5dBm
- Supply Current: +5V @ 26mA

## Functional Diagram (Typicalbond: 100x120um)



**MWL019A**



**MWL019B**

**(Die Thickness: 100 um)**

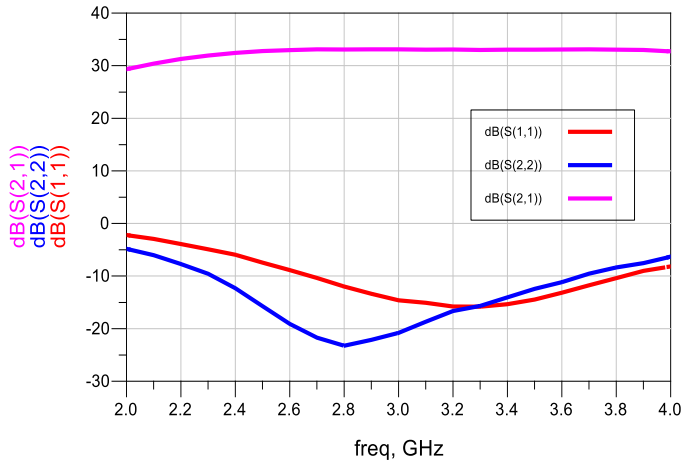
## Electrical Specifications, $T_A = +25^\circ\text{C}$ , $V_{dd} = +5.0\text{ V}$

Parameter	Min	Typ	Max	Units
Bandwidth	2.7		3.5	GHz
Gain		33		dB
Noise Figure		0.67		dB
Input Return Loss		15		dB
Output power for 1dB Compression		11.5		dBm
Supply Current (@Vdd=5V)		26		mA

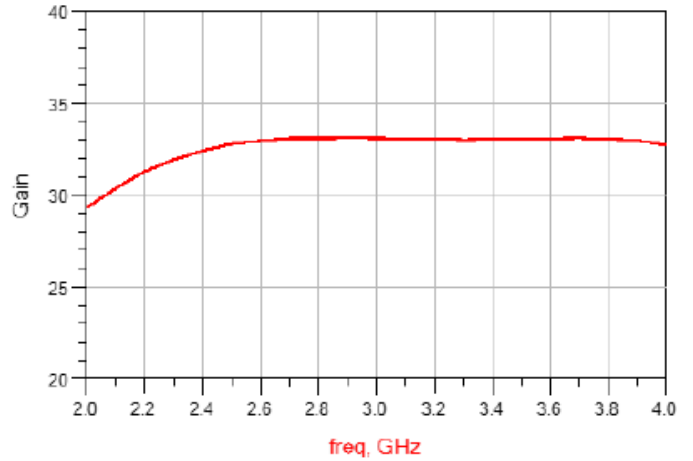


### Test Results

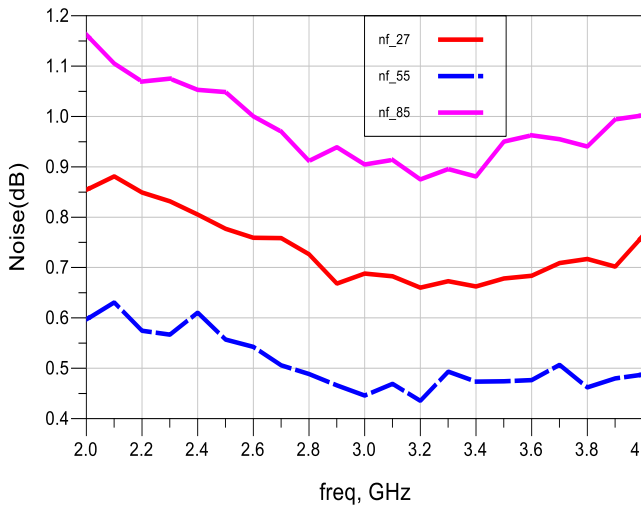
#### S\_Parameter



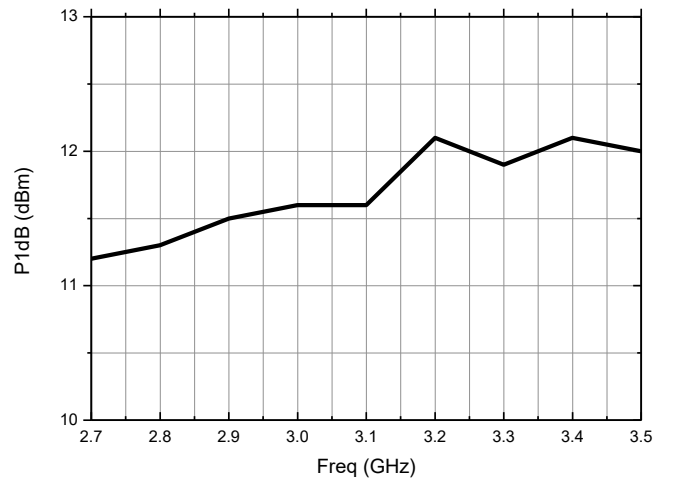
#### Gain



#### Noise Figure VS Temperature

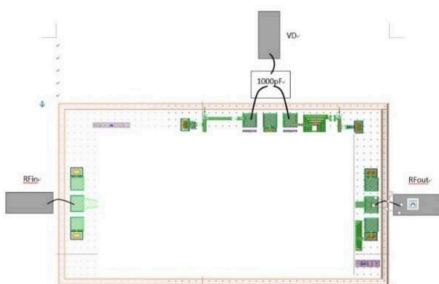


#### P1dB



### Assembly Diagram

#### MWL019A



#### MWL019B

