

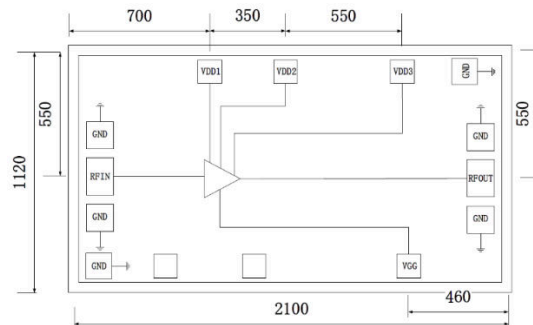
## General Description

The MWG102 is a power amplifier designed and manufactured using the GaAspHEMT process. This medium power amplifier can achieve 16dB small signal gain in the operating frequency range of 21-32GHz, and the output 1dB compression point reaches +24dBm. Due to its excellent performance, this product can be widely used in many fields such as point-to-point mobile communication, VSAT and so on.

## Features

- Gain: 16 dB;
- Output P1dB: +24 dBm
- OIP3: +33 dBm
- Supply Current: +5V @ 200mA

## Functional Diagram(Typicalbond: 100x150um)



(Die Thickness: 100 um)

## Electrical Specifications, $T_A = +25^\circ\text{C}$ , $V_{dd} = +5\text{V}$ , $V_{gg} = -0.8\text{V}$

Parameter	Min	Typ	Max	Units
BandWidth	21		32	GHz
Gain		16		dB
Input Return Loss	6	8	15	dB
Output Return Loss	8	12	16	dB
Output Power for 1dB Compression	23	24		dBm
Output 3 <sup>rd</sup> Intercept Point	29	33		dBm
Supply Current (@Vdd=+5V)		200		mA

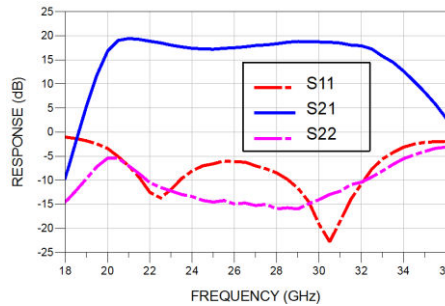
## Output P1dBvs.Frequency

Frequency (GHz)	21	23	25	27	29	32
Output P1dB (dBm)	25	24	23	24	25	24

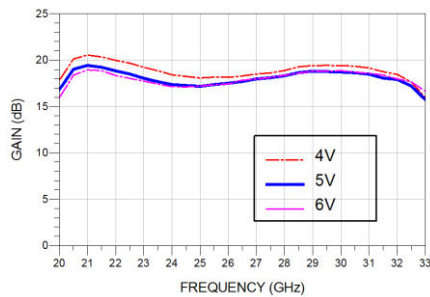


### Test Result

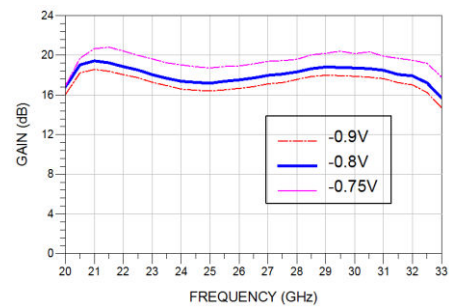
#### S\_Parameter



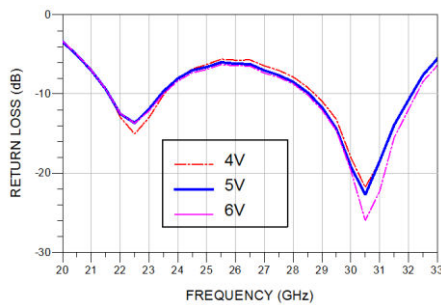
#### Gain



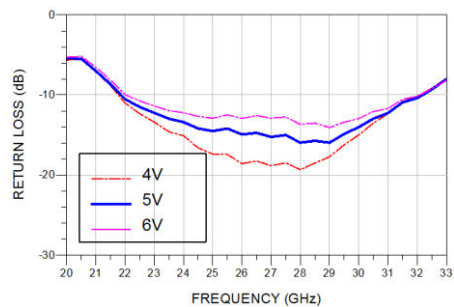
#### Gain



#### Input Return Loss



#### Output Return Loss



### Assembly Diagram

