

General Description

The MWG104 is an efficient GaAs PHEMT MMIC Medium Power Amplifier which operates between 6 and 18GHz, The amplifier provides 23dB of gain, and +18dBm of output power at 1 dB gain compression. while requiring 110 mA from a +5V supply.

Features

Noise Figure: 3.2dB

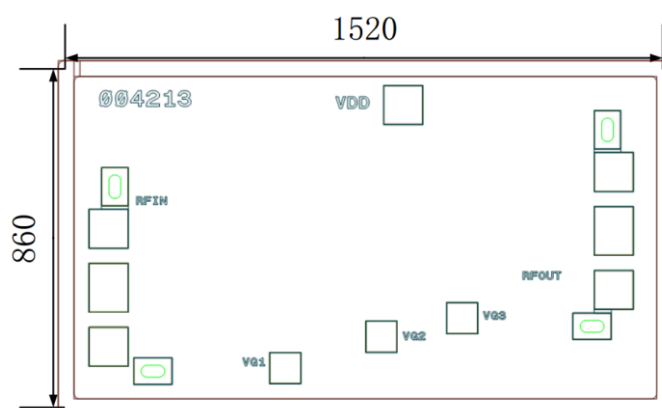
High gain: 23dB

P1dB output power: +18dBm

Supply voltage: +5.0V@110 mA

50 Ohm matched Input /Output: VSWR<2

Functional Diagram(Typical bondpad: 100umx100um)



(Die Thickness: 100 um)

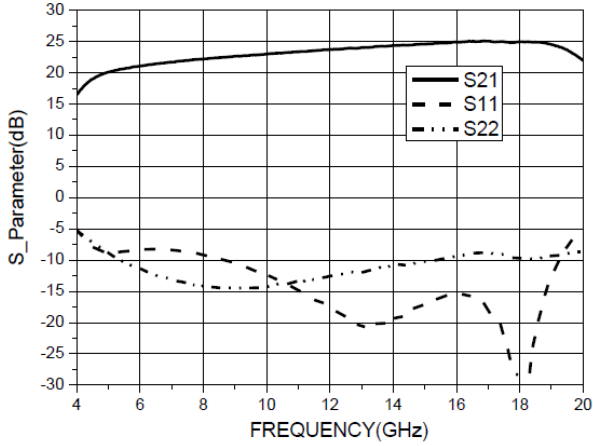
Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{dd} = +5.0\text{V}$

Parameter	Min	Typ	Max	Units
Bandwidth	6		18	GHz
Gain		23		dB
Noise Figure		3.2		dB
Input Return Loss		19		dB
Output Return Loss		16		dB
Output Power for 1dB Compression		18		dBm
Supply Current (@Vdd=5V)		110		mA

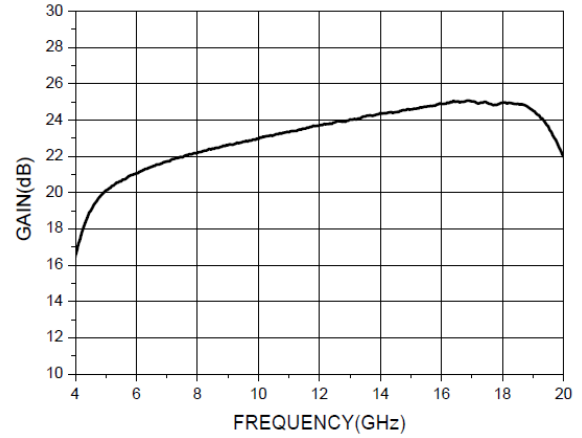


Test Results

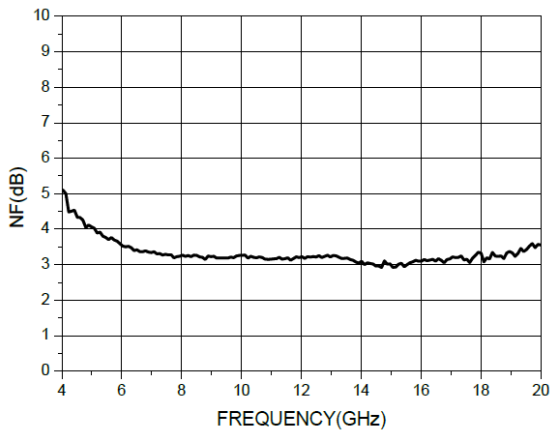
S_Parameter



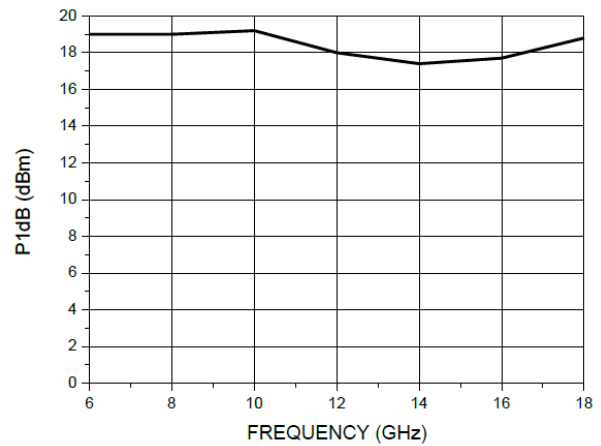
Gain



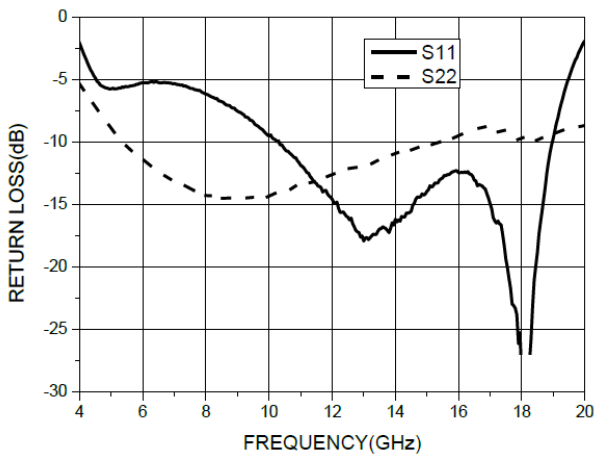
Noise Figure



Output P1dB



Input/Output Return Loss



Assembly Diagram

