

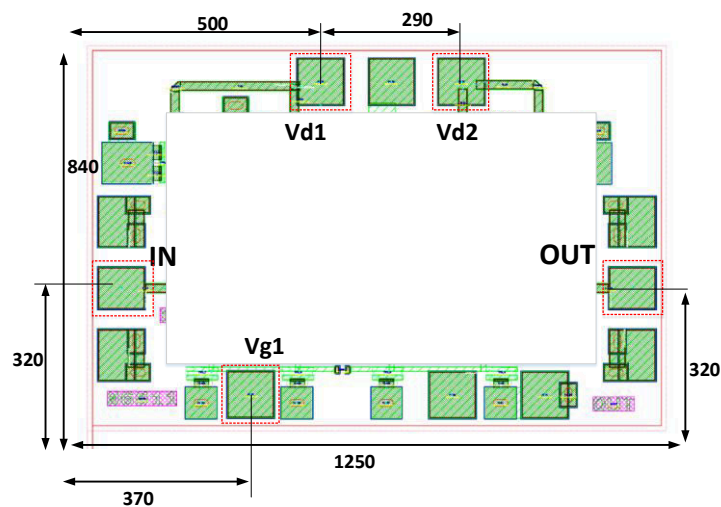
General Description

The MWG308 is an efficient GaAs PHEMT MMIC Medium Power Amplifier which operates between 90 and 100GHz, The amplifier provides 17dB of gain, and +17dBm of Pout. while requiring 108 mA from a +4V supply.

Features

High gain: 17 dB;
 Psat: +17dBm
 Supply voltage: +4V@108 mA
 50 Ohm matched Input /Output

Functional Diagram (Typical bondpad: 100umx100um)



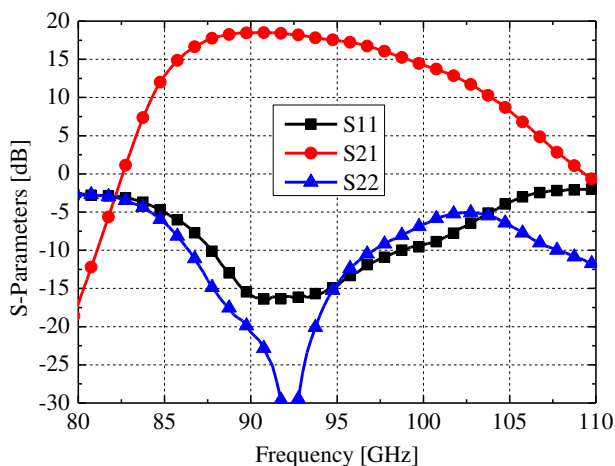
(Die Thickness: 50 um)

Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{d1} = V_{d2} = +4\text{V}$, $V_g = -0.4\text{V}$

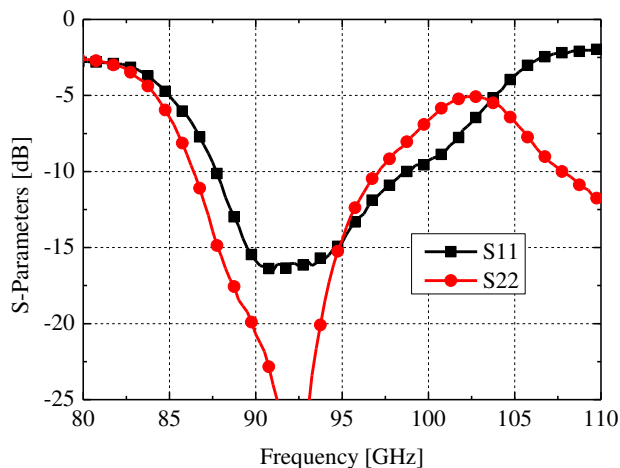
Parameter	Min	Typ	Max	Units
Bandwidth	90		100	GHz
Gain		17		dB
Input Return Loss	6	10		dB
Output Return Loss		10		dB
Psat		17		dBm
Supply Current (@Vdd=+4.0V)		108		mA

Test Result

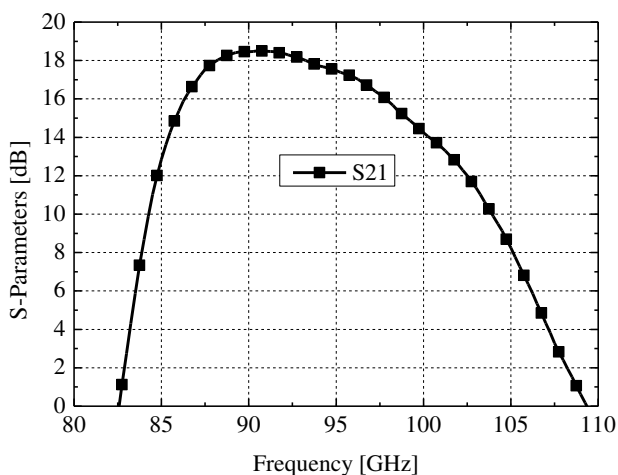
Frequency Response



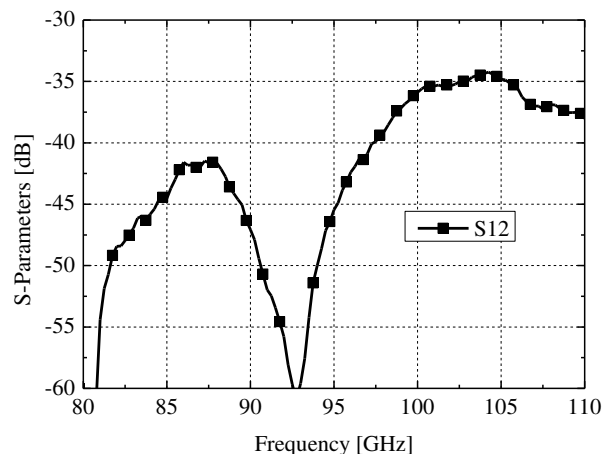
Input & Output Return Loss



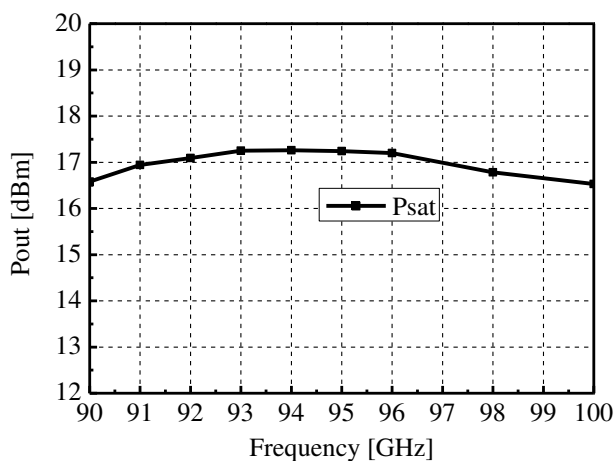
Gain



S12



Psat



Assembly Diagram

