

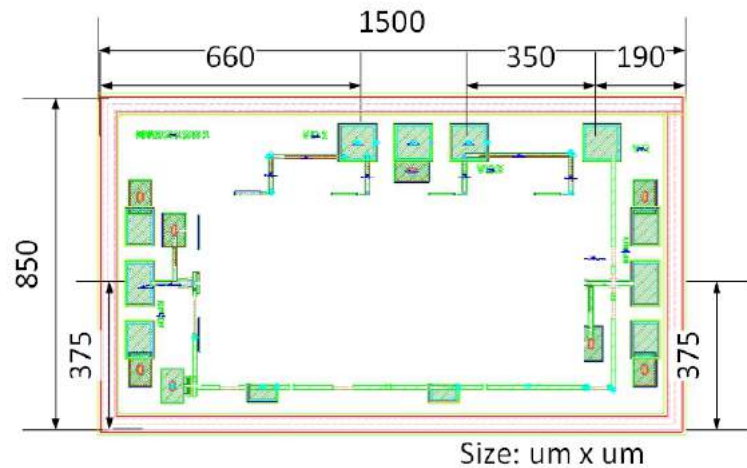
General Description

MWG108 is a broadband power driven amplifier designed and manufactured by GaAs pHEMT technology. This amplifier can cover 38-48 GHz, provide 25 dB small signal gain, output 1 dB compression point to + 15 dBm, , normal operating current 90 mA.

Features

Gain : 25dB;
Output P1dB : +15dBm;
Supply Current : +5.0V/-0.75V @ 90mA;
Chip Size: 1500*850 um

Functional Diagram(Typicalbond: 100x100um)



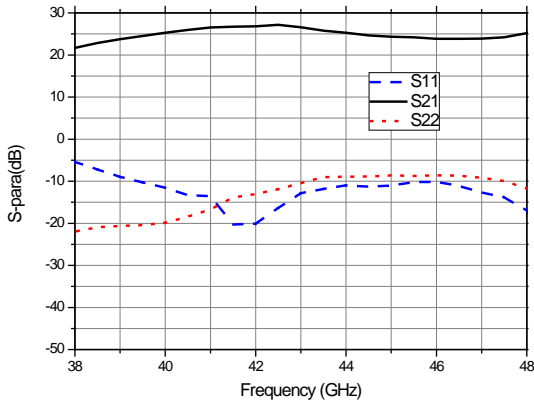
Electrical Specifications , $T_A = +25^\circ\text{C}$, $V_{dd} = +5.0\text{V}$

Parameter	Min	Typ	Max	Units
Bandwidth	38		48	GHz
Gain		25		dB
Input Return Loss		10		dB
Output Return Loss		10		dB
Output Power for 1dB Compression		15		dBm
Supply Current (@Vdd=5V)		90		mA

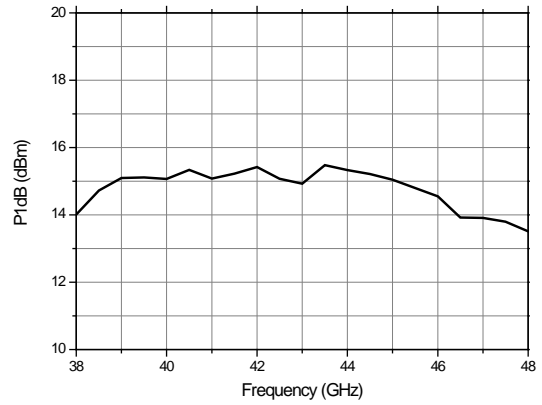


Test Result

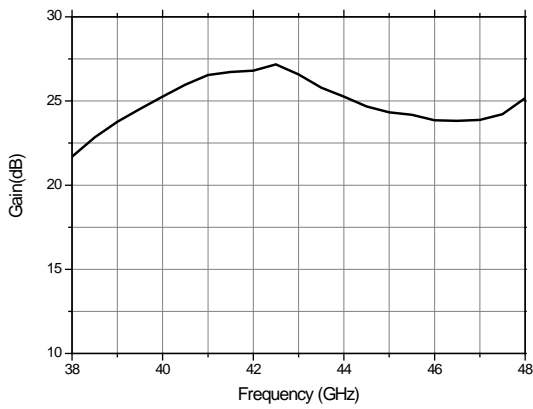
S_Parameter



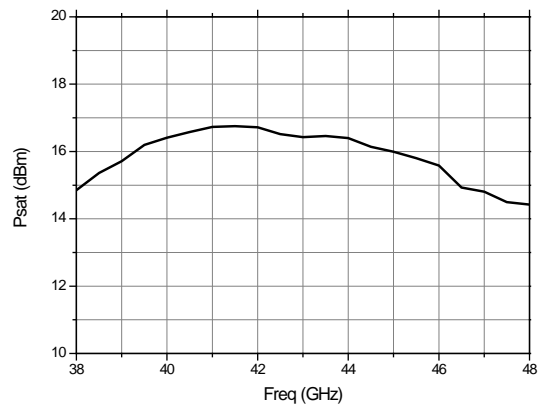
Output P1dB



Gain



Psat



Assembly Diagram

