

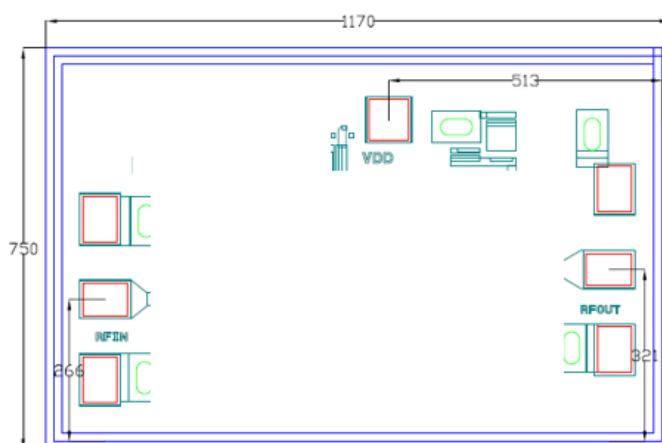
General Description

MWG106 is a broadband power driver amplifier designed and manufactured by GaAs pHEMT technology. This amplifier can achieve 17 dB small signal gain in the operating frequency band of 20-31 GHz. The output 1 dB compression point reaches +16 dBm. It can be used as the driving stage of LO drive amplifier or power amplifier.

Features

Gain: 17dB;
 Output P1dB: +16 dBm;
 Supply Current: +5.0V @ 55m;
 Chip Size: 1170×750×100 um

Functional Diagram (Typical bond:100×100, unit: um)

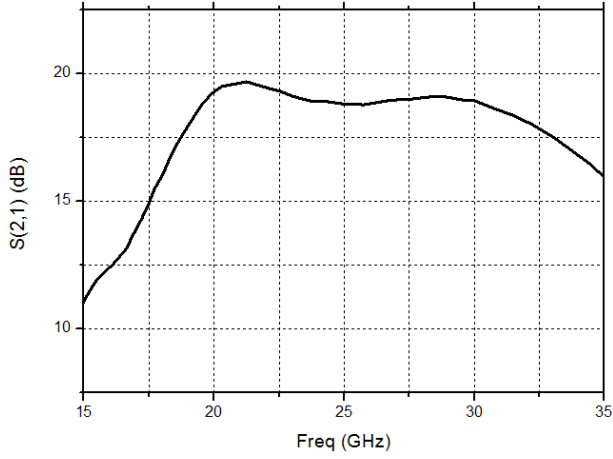


Electrical Specifications, $T_A = +25^\circ\text{C}$, $V_{dd} = +5.0\text{V}$

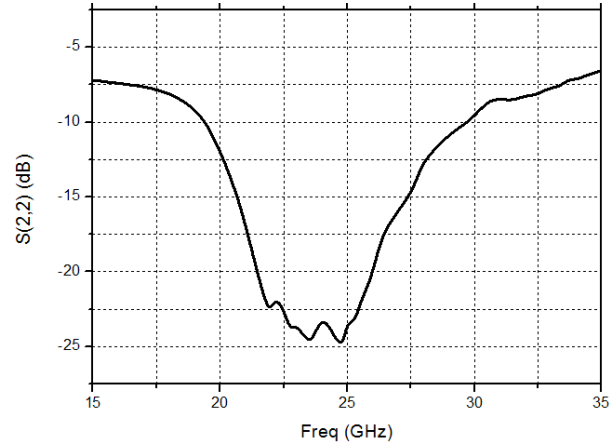
Parameter	Min	Typ	Max	Units
Bandwidth	20		31	GHz
Gain		18		dB
Input Return Loss		12		dB
Output Return Loss		12		dB
Output Power for 1dB Compression		16		dBm
Supply Current (@Vdd=5V)		55		mA

Test Results

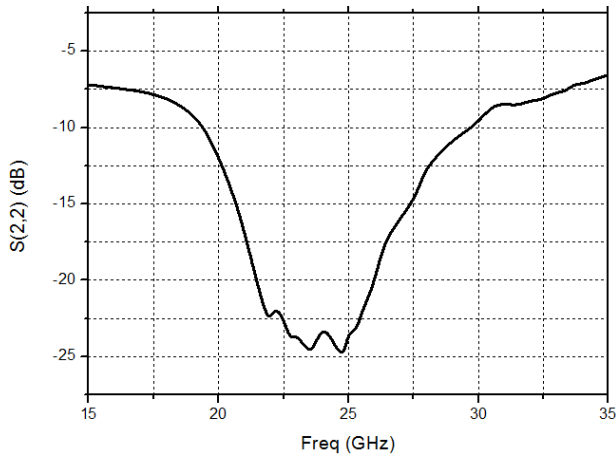
S21



S11



S22



Assembly Diagram:

