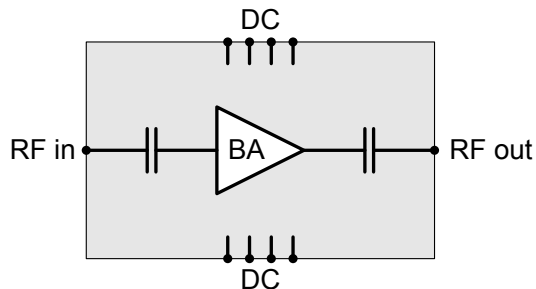


Description



This low noise amplifier is a GaAs amplifier. Intended for V-band high capacity communication links. It features very broadband performance. It also features individual gate bias control for optimum tuning ability.

Applications

- V-band point to point communication links.
- Test equipment

Performance

Parameter	Typical Specification
Gain	>20 dB
Bandwidth (3 dB)	57 to 66 GHz
Input return loss	>7 dB
Output return loss	>10 dB
NF	3.5 dB
P1 dB	10 dBm
Power consumption	120 mW

Connector P1

No.	Connector (From right to left)	P1	Bias voltage (bias current) & settings	Bias sequence
1				
2	Vd2_amp2_3		+2.0 V (50 mA)	2
3	Vg2_amp2_3		-0.5 V	1
4	GND			
5	Vd1_amp1		+1.2 V (10 mA)	2
6	Vg1_amp1		-0.5 V	1
7				

Connector P2

Connector P2	Bias voltage (bias current) & settings	Bias sequence
RF OUT		

Connector P3

Connector P3	Bias voltage (bias current) & settings	Bias sequence
RF IN		

Measurements

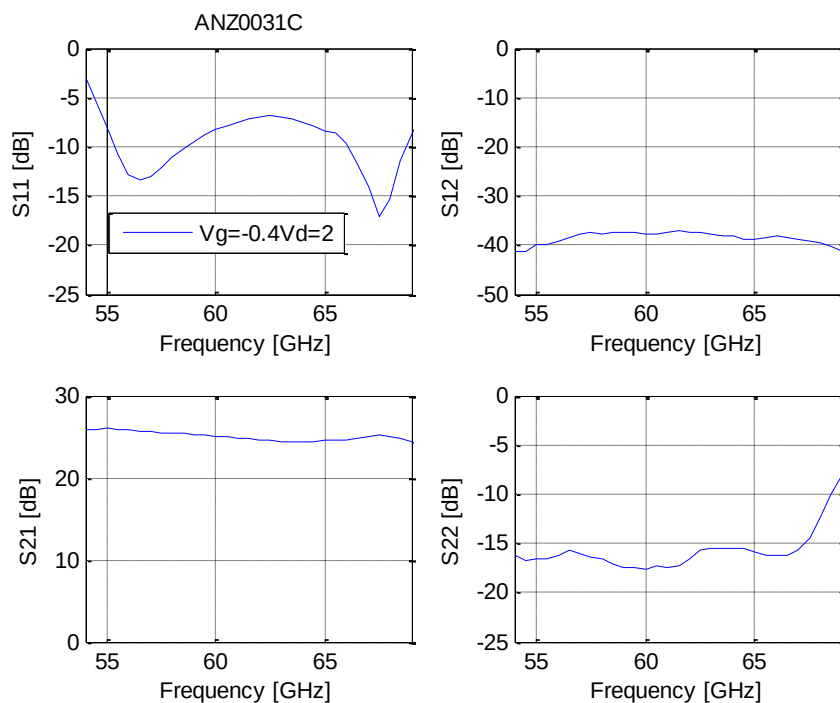


Fig 1 S parameters

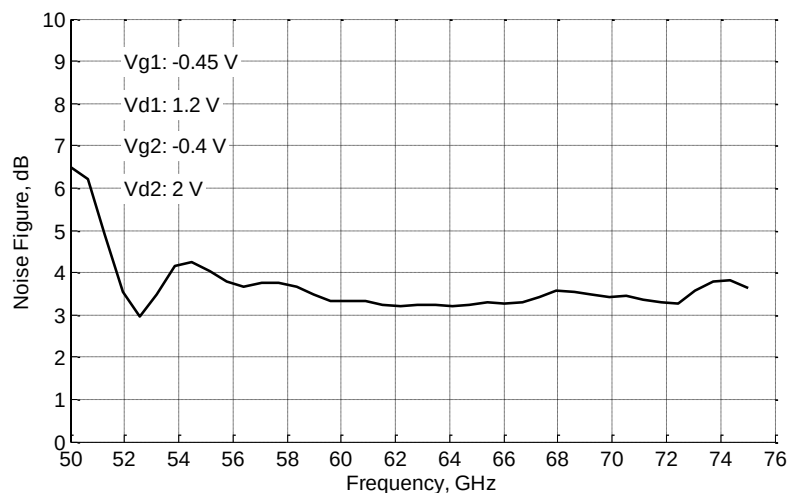


Fig 2 NF

Outline drawing

Distances are in mm. Drawing is also available in dwg format upon request. RF probe pitches from 100µm on the output and to 100µm at the input for easy on-chip testing and DC probe pitch 150 µm. Substrate thickness is 50 µm (GaAs).

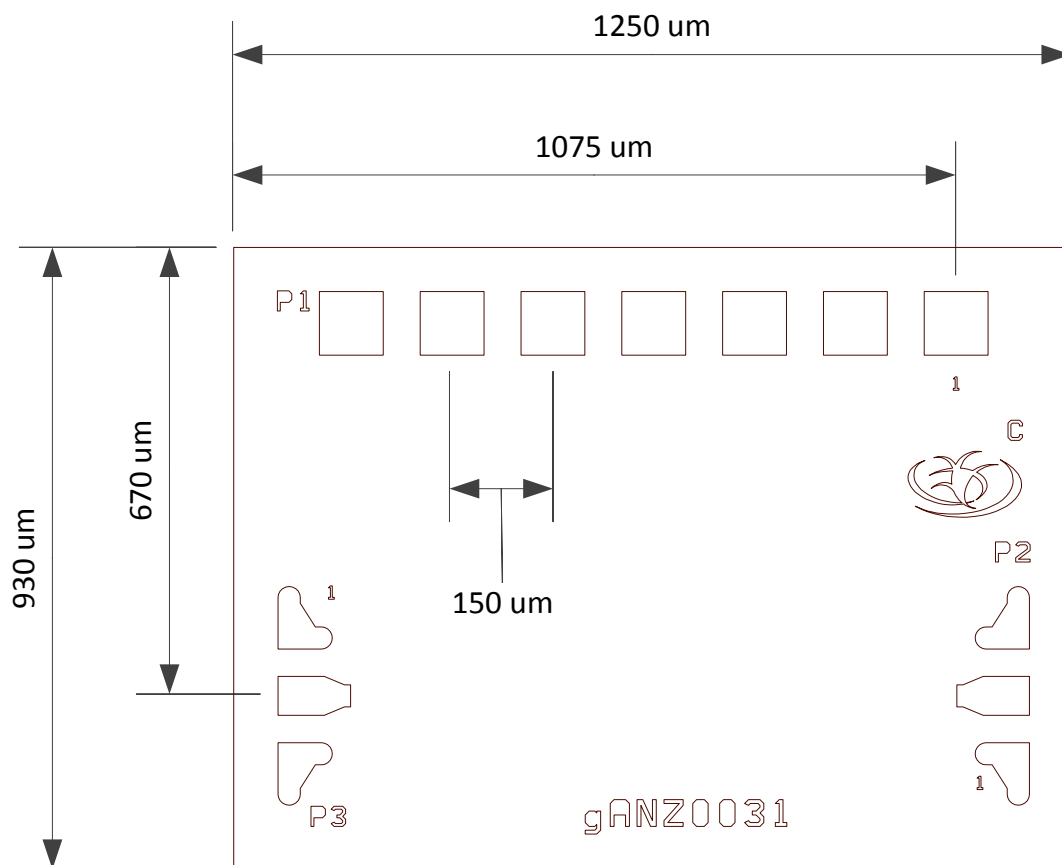


Fig. 3 Layout gANZ0031