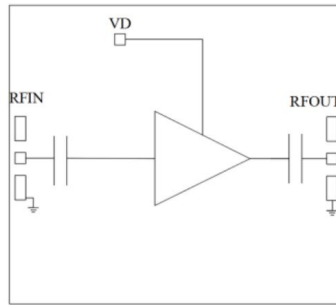


Performance

- Frequency: 22~24GHz
- Typical Gain: 26.5dB
- Noise Figure: 1.6dB
- Typical P-1: 1dBm
- VSWR in/out: 1.6/1.6
- Supply: 11mA
- Technology: 0.15um GaAs PHEMT
- Size: 1.92mm*0.75mm*0.1mm

Function Diagram

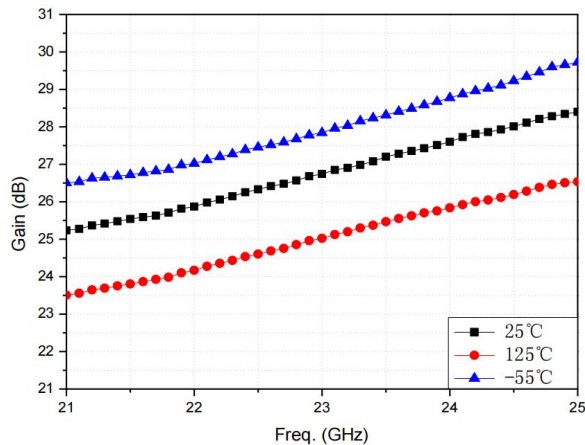


Electrical Specifications (TA=25°C, Vd=5V, F: 22~24GHz (Interval0.1GHz))

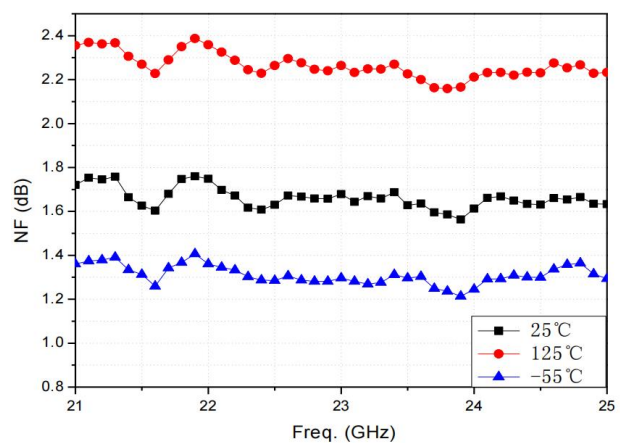
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	25	26.5	-	dB
NF	Noise Figure	-	1.6	1.7	dB
VSWRin	Input VSWR	-	1.5	1.6	
VSWRout	Output VSWR		1.5	1.6	
P-1	Pout at 1dB compression	1	2	-	dBm
Id	Drain Current		10	11	mA

Test Curves

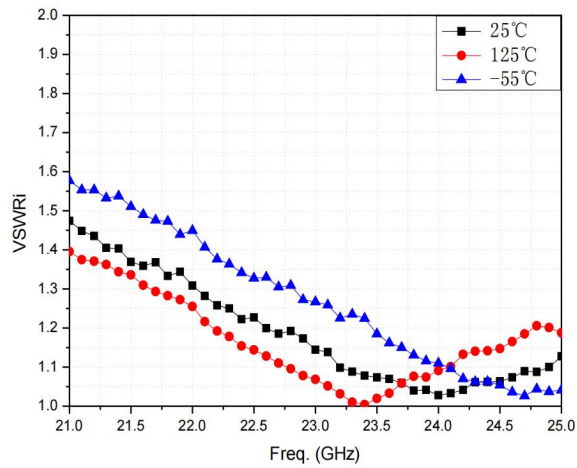
Small Signal Gain@Different Temp.



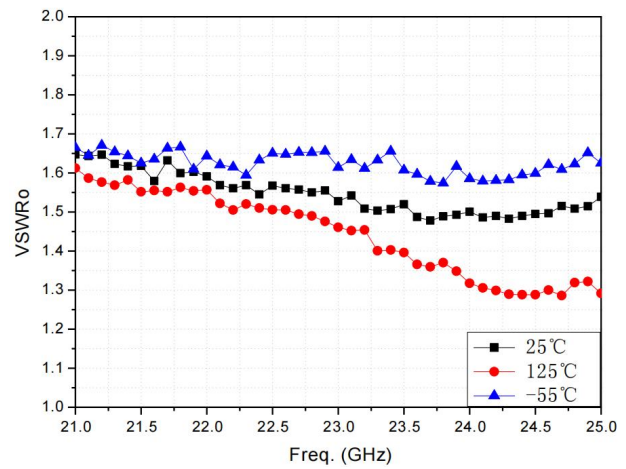
Noise Figure@Different Temp.



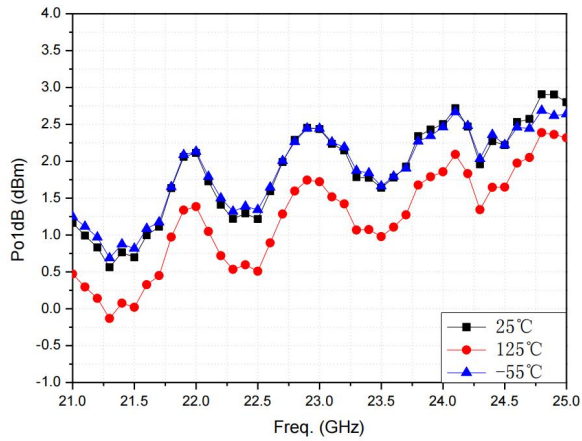
VSWRin@Different Temp.



VSWRout@Different Temp.



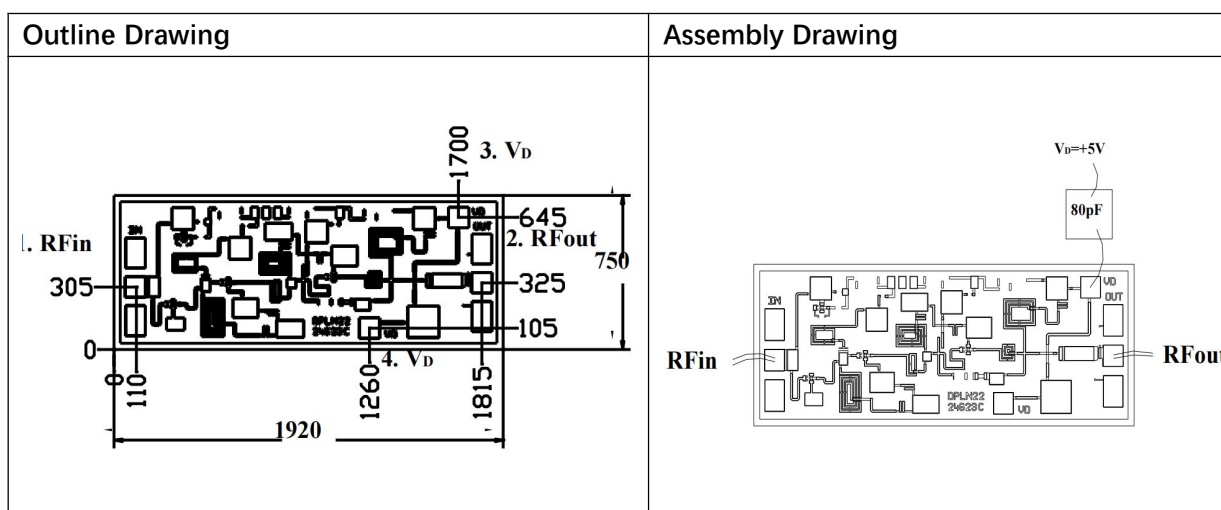
P-1@Different Temp.



Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	7V	
Pin	Input Power	16dBm	
Tch	Channel Temperature	150°C	
Tm	Mounting Temperature	290°C	30 s, N2 Protection
Tstg	Storage Temperature	-55~150°C	

Exceeding any one or combination of these limits may cause permanent damage.



Pads Definition

Pad	Description
RFin	RF Signal input, connect to 50ohm system, no need block capacitor.
RFout	RF Signal output, connect to 50ohm system, no need block capacitor.
VD	Amplifier drain bias, connect to external 80pF capacitor
GND	Bottom must be well connected with RF and DC ground

Precautions:

- The sintering temperature is not higher than 310°C, and the time is not longer than 30 seconds;
- Good grounding is required during use;
- The chip is an electrostatic sensitive device. During use and transportation, you should pay attention to anti-static, and avoid violent collisions and drops to avoid damage to the product;
- When in use, it is recommended to connect a decoupling capacitor at the power supply terminal according to Figure D.1;
- Gold wires with a diameter of 25 μm should be used for the power feed, input and output interconnection of the chip;
- This product is a hydrogen sensitive device with a hydrogen resistance of 20000ppm. It is recommended to control the hydrogen concentration in the sealed cavity when using it.