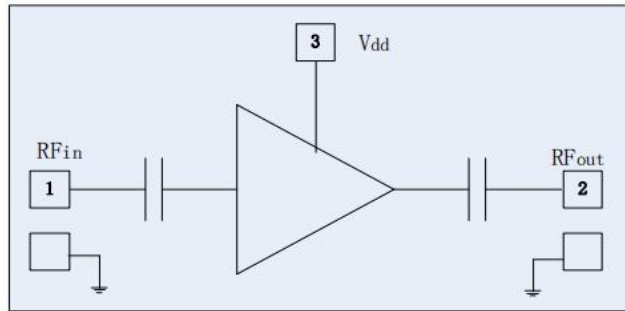


Performance

- Frequency: 6~18GHz
- Noise Figure: 1.5dB
- Typical Gain: 21dB
- Typical P-1: 5dBm
- VSWR in/out: 1.5
- Supply: +5V
- Technology: 0.15um low noise PHEMT
- Size: 2.0mm*1.0mm*0.1mm

Function Diagram

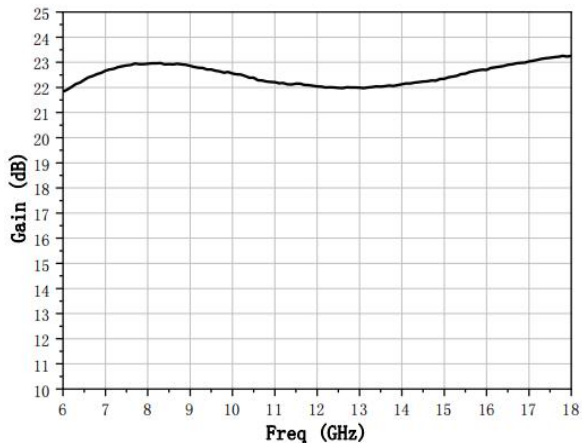


Electrical Specifications (T_A=25°C, V_d=5V, F: 6~18GHz)

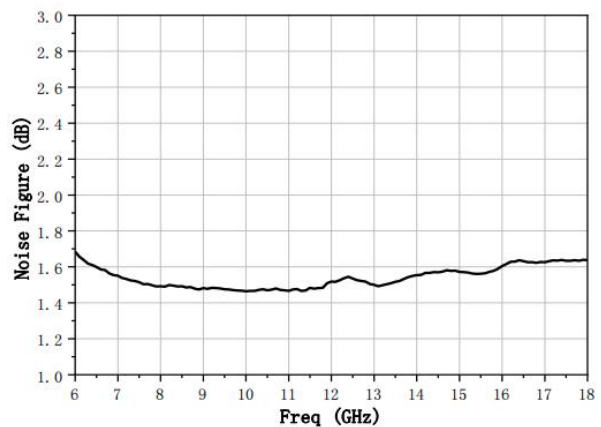
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	20	21	-	dB
NF	Noise Figure	-	1.5	1.8	dB
VSWR _{in}	Input VSWR	-	1.5	1.8	
VSWR _{out}	Output VSWR	-	1.5	1.8	
P-1	Pout at 1dB compression	4	5	-	dBm
I _d	Drain Current		42	50	mA

Test Curves

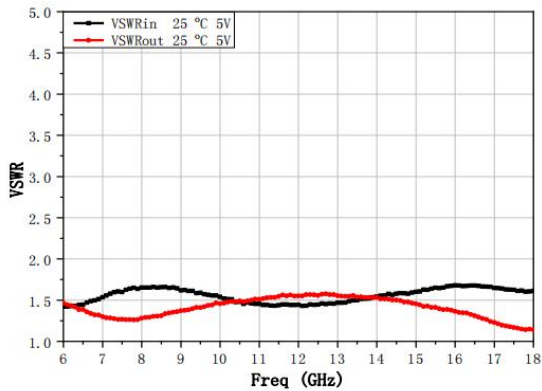
Small Signal Gain vs. Freq



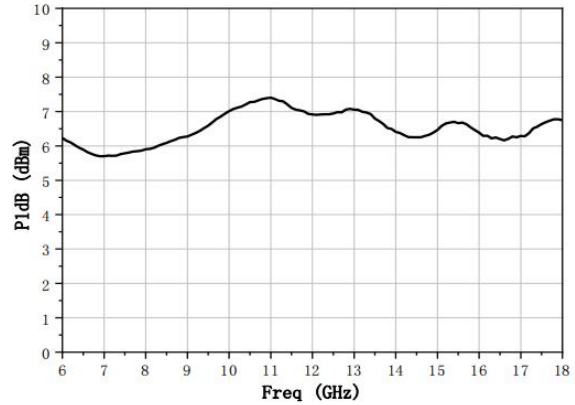
Noise Figure vs. Freq



VSWR in/out vs. Freq



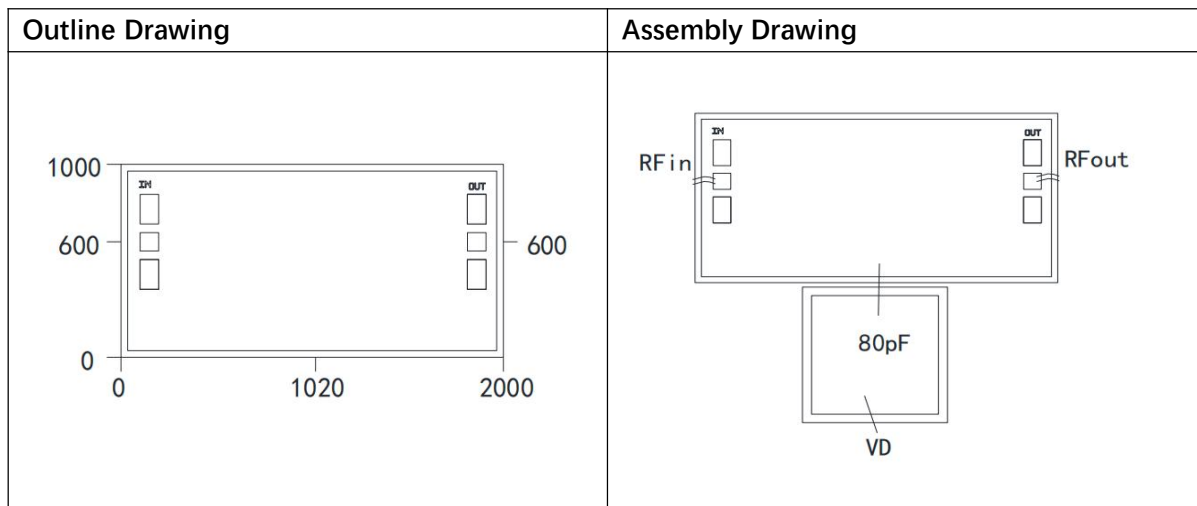
Pout P-1dB vs. Freq



Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	7V	
Pin	Input Power	17dBm	
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.
Vdd	Amplifier drain bias, connect to external 80pF capacitor
GND	Bottom must be well connected with RF and DC ground