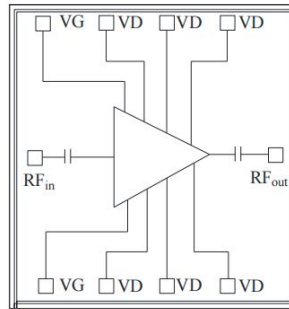


Performance

- Frequency: 60~90GHz
- Typical Signal Gain: 20dB
- Typical Pout: 33.4dBm@15V
- Typical PAE: 10%
- Power Gain: 10.4dB
- Dynamic Current: 1.4A
- Bias: 15V, -1.8V (Typ.)
- Size: 4.0*2.9mm*0.05mm

Function Diagram

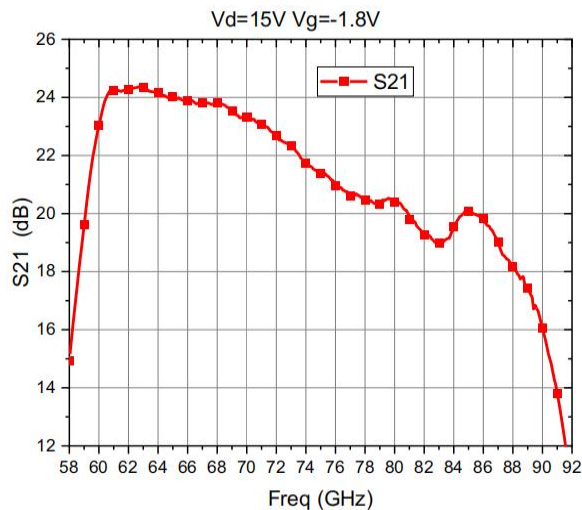


Electrical Specifications (T_A=25°C, V_d=15V, I_{dq}=1.23A, F:60~90GHz, CW)

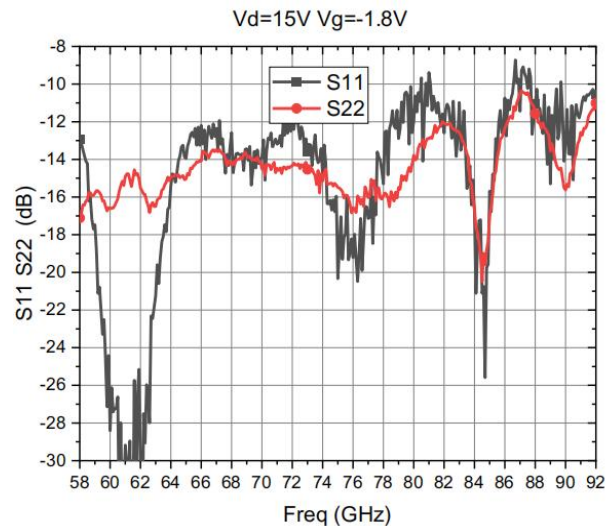
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	20	-	dB
Gp	Power Gain	-	10.4	-	dB
Pout	Saturated Power	-	33.4	-	dBm
PAE	Power Added Efficiency	-	10	-	%

Test Curves

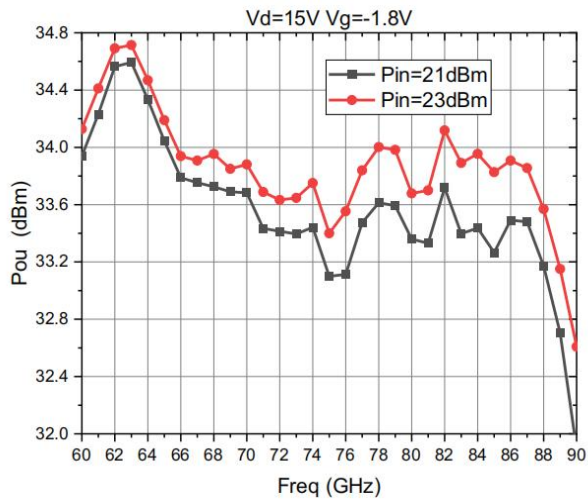
Small Signal Gain



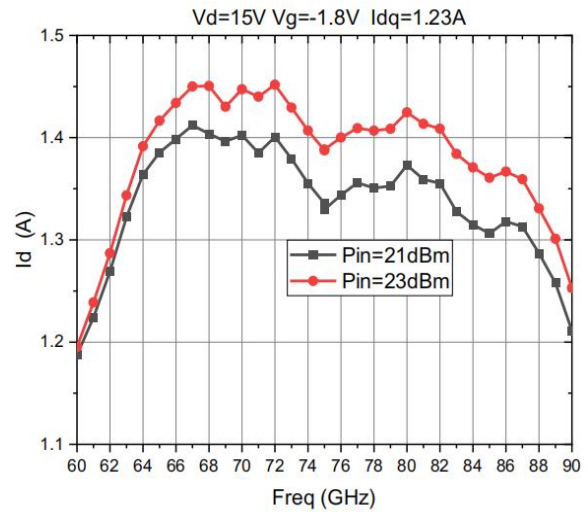
VSWR



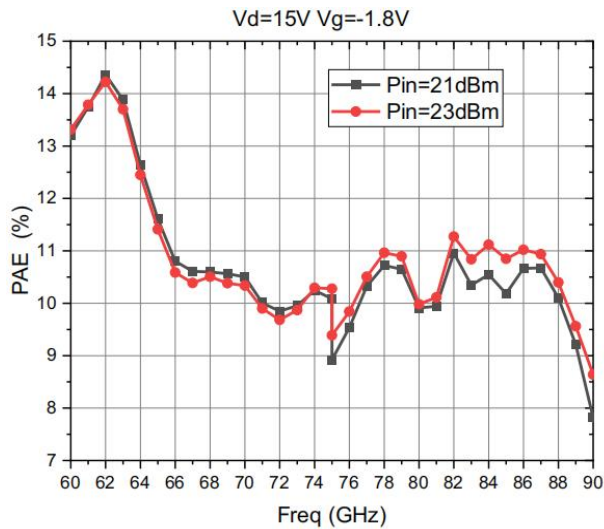
Pout@ Different Pin



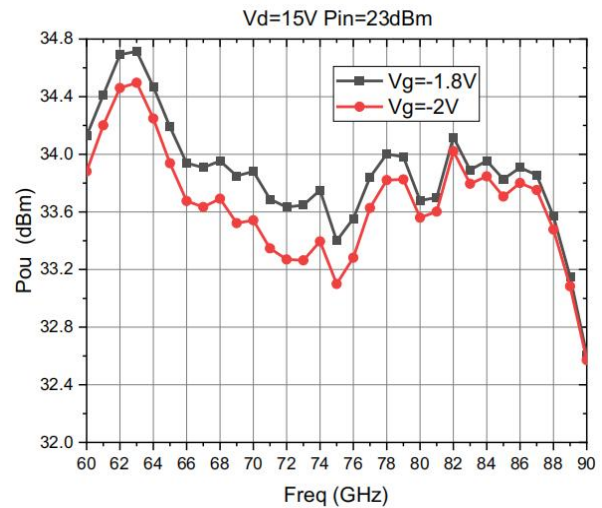
Id@ Different Pin



PAE@ Different Pin



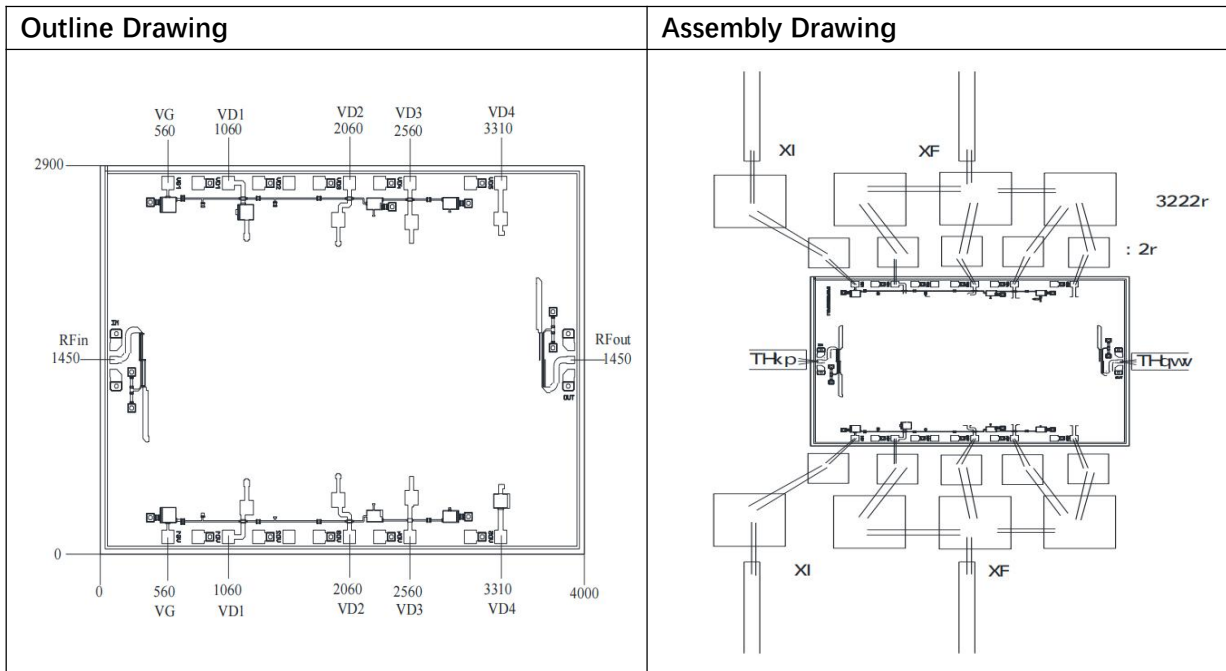
Pout@ Different Vg



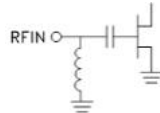
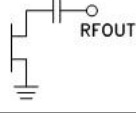
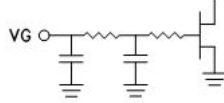
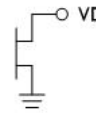
Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	20V	
Id	Drain Current	2.5A	
Vg	Gage Voltage	-5V	
Ig	Gate Current	10mA	
Pd	DC Power	45W	
Pin	Input Power	28dBm	
Tch	Channel Temperature	200°C	
Tm	Mounting Temperature	310°C	1 min, N2 Protection
Tstg	Storage Temperature	-65~150°C	

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



Pads Definition

Pad	Description	Equivalent Circuit	Pad Dimension (Unit: um)
RFin	RF Signal input, connect to 50ohm system, no need block capacitor.		65*55
RFout	RF Signal output, connect to 50ohm system, no need block capacitor.		65*55
VG	Amp gate bias, external 10uF capacitor is needed		100*100
VD1、VD2、VD3	Amp drain bias, external 10uF capacitor is needed		100*100
GND	Bottom must connect to RF and DC ground		100*100