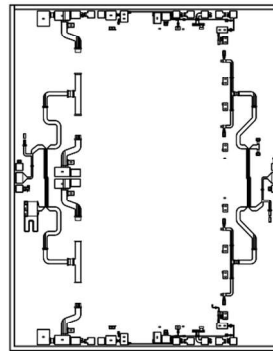


Performance

- Frequency: 33~37GHz
 - Typical Small Signal Gain: 21dB
 - Typical Output Power: 36dBm@6.5V
 - Typical PAE: 23%
- Technology: 0.15um HEMT
- Bias Voltage: 6.5V, -0.7V (Typ.)
 - Size: 3.8*4.8mm*0.05mm

Function Diagram

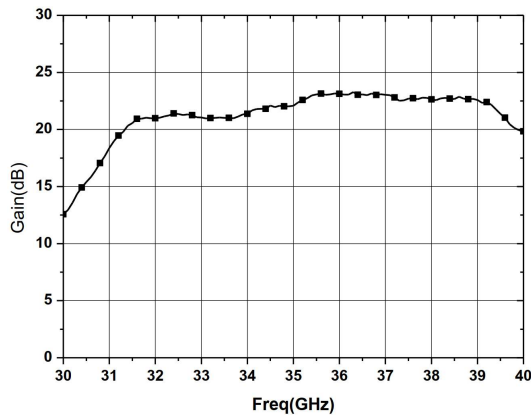


Electrical Specifications (Vd=6.5V, Vg=-0.7V, F=33-37GHz, 10% D.C. 50us PW)

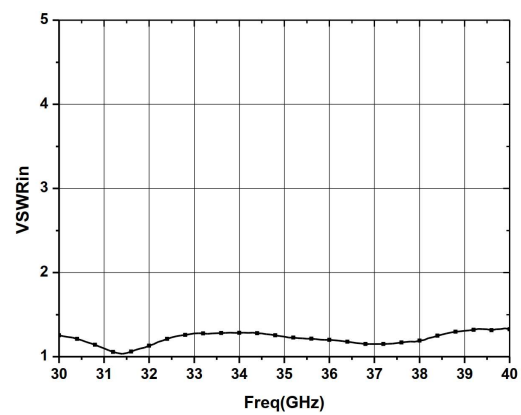
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	21	-	dB
GP	Power Gain	-	15	-	dB
Pout	Saturated Power	-	36	-	dBm
PAE	Power Added Efficiency	-	23	-	%

Test Curves

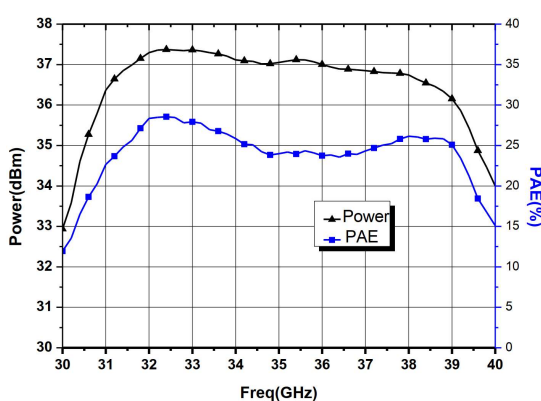
Gain vs. Freq (Vd=6.5V, Pin=-20dBm)



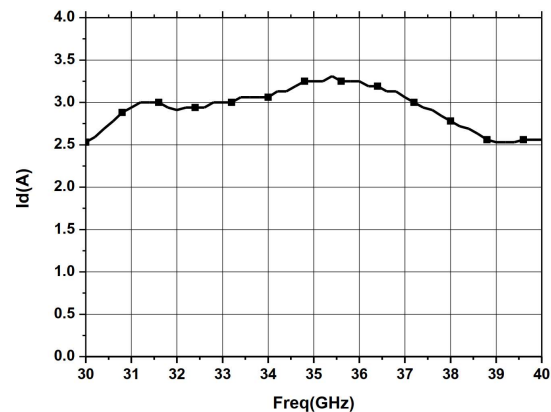
Input VSWR vs. Freq (Vd=6.5V, Pin=-20dBm)



Output Power vs. Freq (Vd=6.5V, Pin=21dBm)



Gate Current vs. Freq (Vd=6.5V, Pin=21dBm)

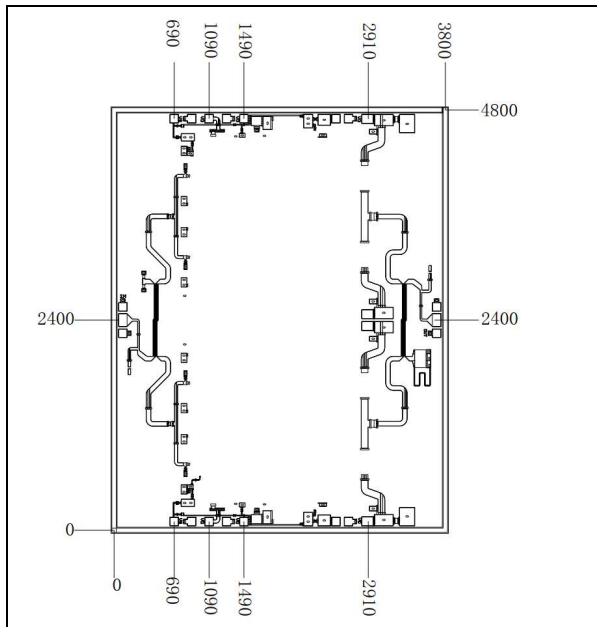


Absolute Max Ratings (TA=25°C)

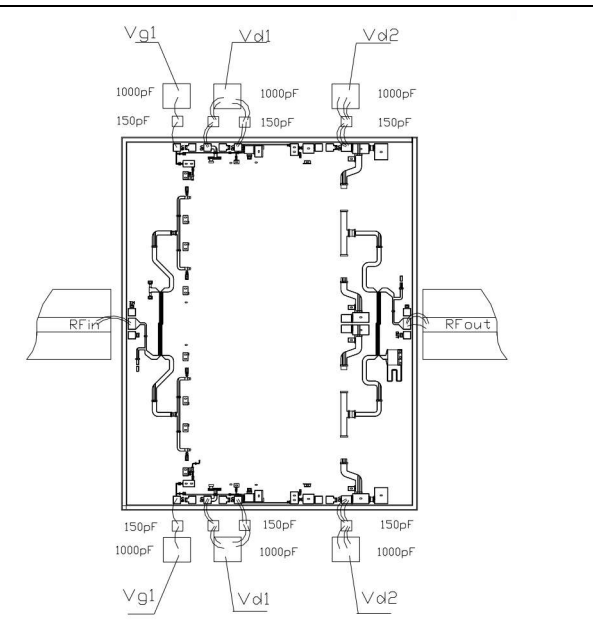
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	7.5V	
Id	Drain Current	5.5A	
Vg	Gate Voltage	-5V	
Ig	Gate Current	50mA	
Pd	DC Power	35W	
Pin	Input Power	28dBm	
Tch	Channel Temperature	150°C	
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

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

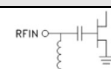
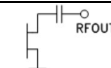
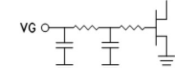

Outline Size



Assembly Drawing



Pads Definition

Number	Description	Equivalent Circuits
RFin	RF input, connect to 50Ω system, block capacitor is needed if there's external DC applied on this pad.	
RFout	RF output, connect to 50 Ω system, no block capacitor needed	
VG	Amplifier grid bias, external 100pF, 1000pF capacitors needed	
VD1, VD2, VD3	Amplifier drain bias, external 100pF, 1000pF capacitors needed	
GND	Bottom must be well connected to RF and DC grounded	