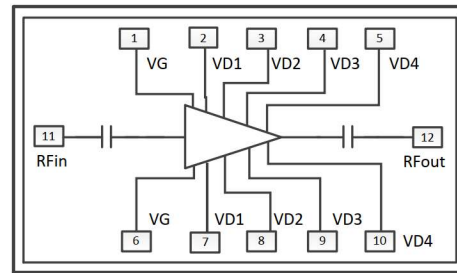


Performance

- Frequency: 33~37GHz
Typical Linear Gain: 18dB
Typical Pout: 30dBm@6V
- Typical PAE: 30%
- Technology: 0.15um pHEMT
- Bias: Vd=6V, Vg=-0.8V
- Size: 3.0*1.6mm*0.05mm

Function Diagram

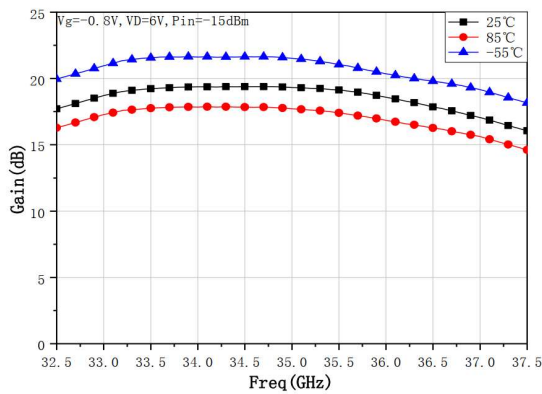


Electrical Specifications (TA=25°C, 33-37GHz, Vg=-0.8V, Vd=6V)

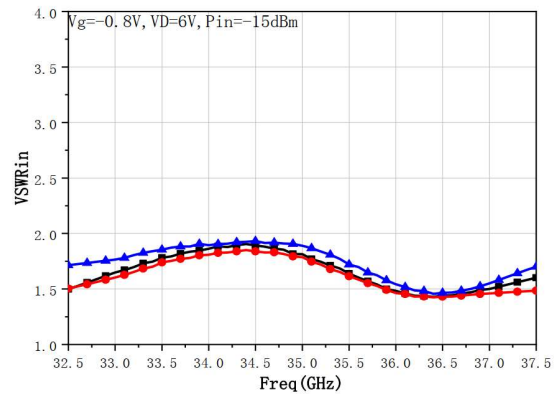
Symbol	Parameter	Min	Typical	Max	Unit
Glin	Linear Gain	-	18	-	dB
Gp	Power Gain	-	17	-	dB
Pout	Saturated Output Power	-	30	-	dBm
PAE	Power Added Efficiency	-	30	-	%

Test Curves

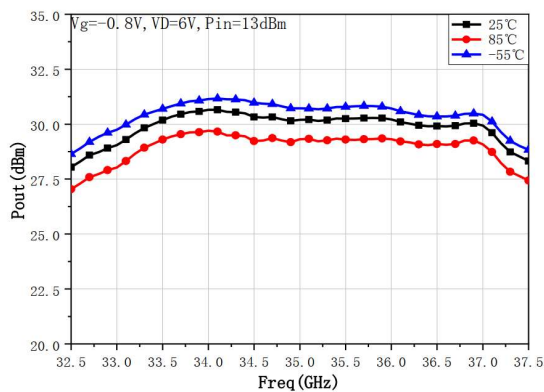
Small Signal Gain vs. Freq



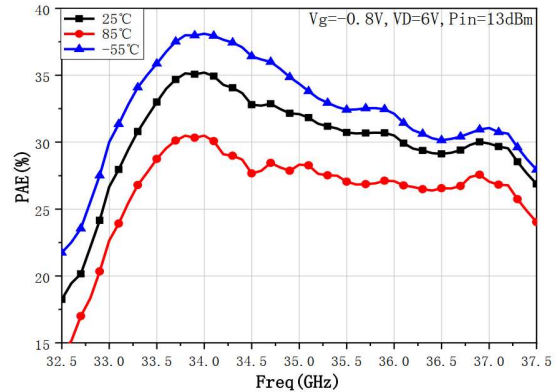
Input VSWR vs. Freq



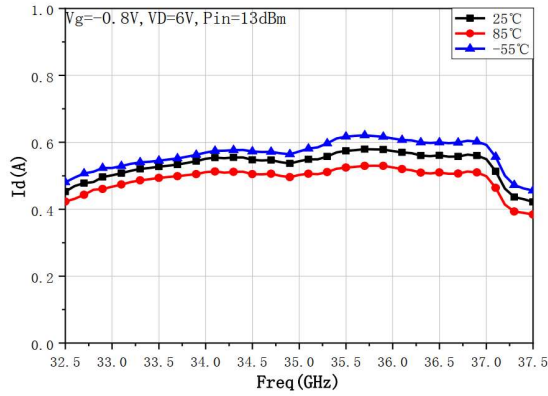
Pout vs. Freq



PAE vs. Freq



Drain current vs. Freq

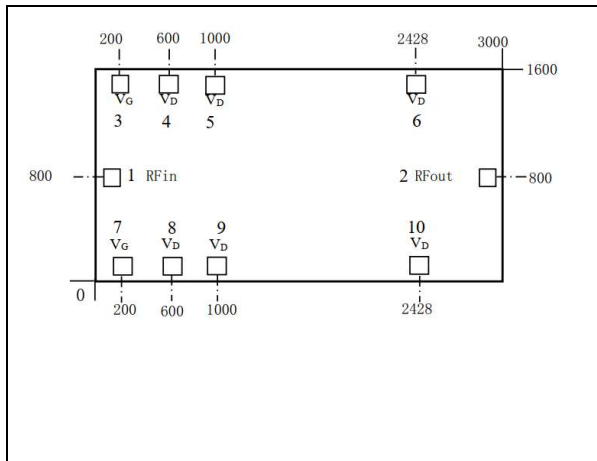


Absolute Max Ratings (TA=25°C)

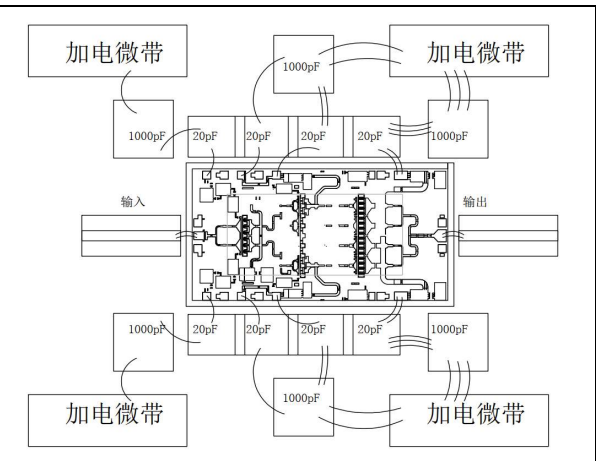
Symbol	Parameter	Value	Remark
Vd	Drain Bias Voltage	7V	
Id	Drain Bias Current	5A	
Vg	Gate Bias Voltage	-2V	
Ig	Gate Bias Current	100mA	
Pd	Power Dissipation	4.5W	
Pin	Input CW Power	20dBm	
Tch	Channel Temperature	150°C	
Tm	Mounting Temperature	300°C	1min, N2 Protection
Tstg	Storage Temperature	-55~150°C	

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

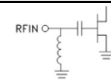
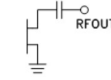
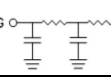
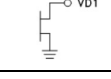
Outline Size



Assembly Drawing



Pads Definition

Number	Description	Equivalent Circuits
IN	RF input, connect to 50 Ω system, no block capacitor needed	
OUT	RF output, connect to 50 Ω system, no block capacitor needed	
VG	Amplifier grid bias, external 100pF, 1000pF, 10uF capacitors needed	
VD1, VD2, VD3	Amplifier drain bias, external 100pF, 1000pF capacitors needed	
GND	Bottom must be grounded	