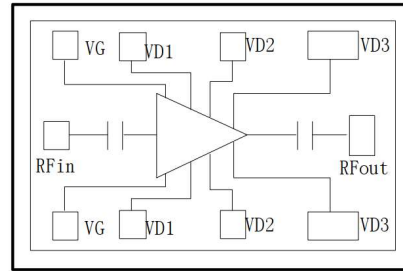


Performance

- Frequency: 8.5~10.5GHz
- Typical Small Signal Gain: 25dB
- Typical Psat: 41.2dBm
- Typical PAE: 40%
- Technology: 0.35um PHEMT
- Bias Condition: 8.5V, -0.6V
- Size: 3.2*4.0mm*0.08mm

Function Diagram

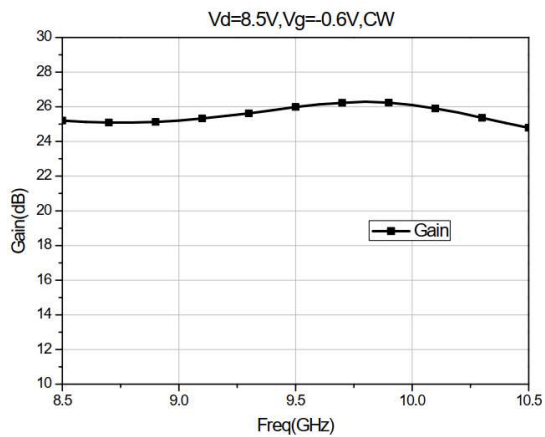


Electrical Specifications (Vd=8.5V, Vg=-0.6V, Freq=8.5~10.5GHz)

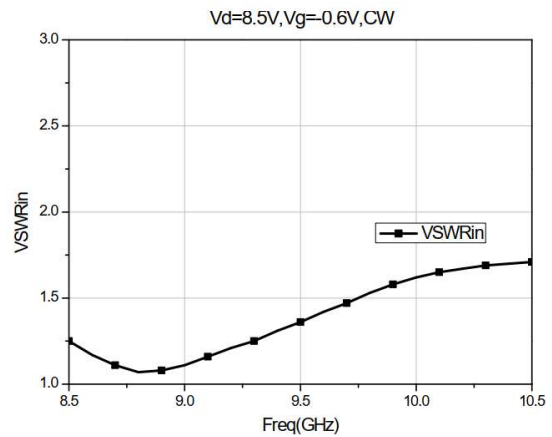
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	25	-	dB
Gp	Power Gain	-	22	-	dB
Pout	Saturated Output Power	-	41.2	-	dBm
PAE	Power Added Efficiency	-	40	-	%

Test Curves

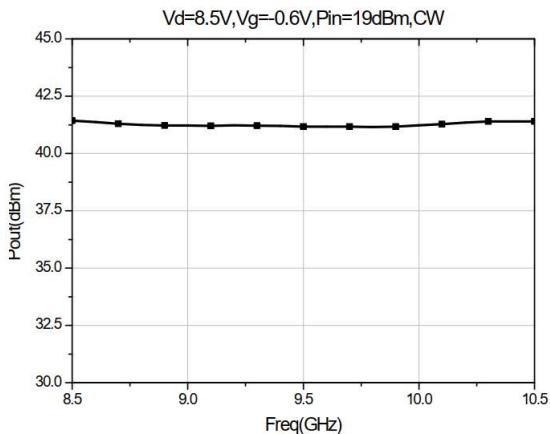
Small Signal Gain vs. Freq



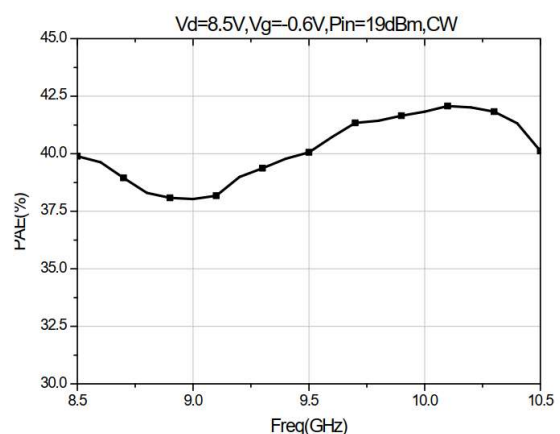
Input VSWR vs. Freq



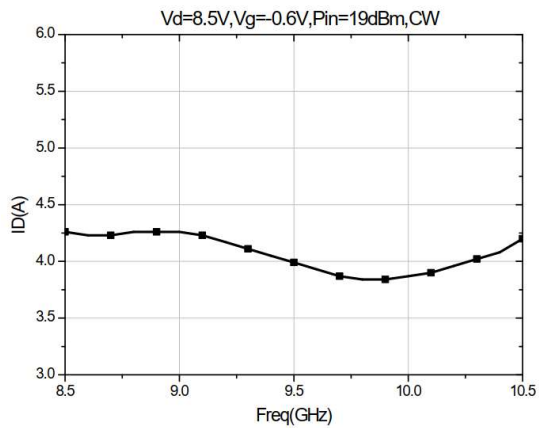
Pout vs. Freq



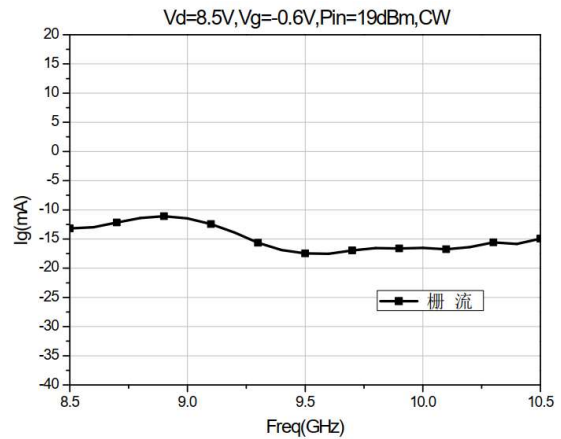
PAE vs. Freq



Drain Current vs. Freq



Grid Current vs. Freq vs. Temperature

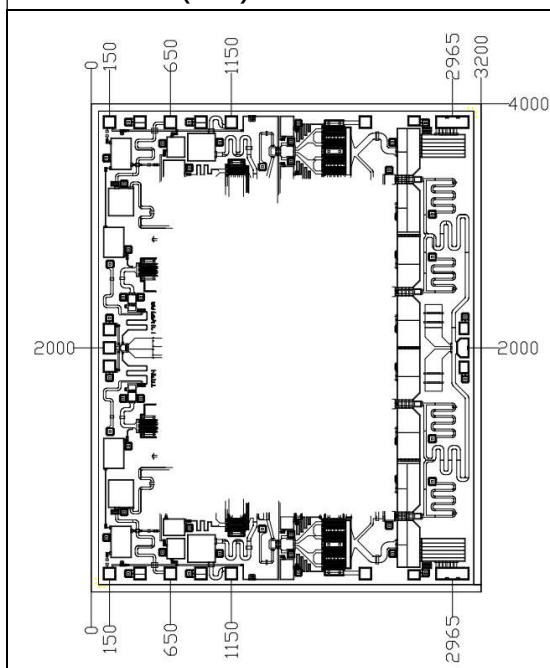


Absolute Max Ratings (TA=25°C)

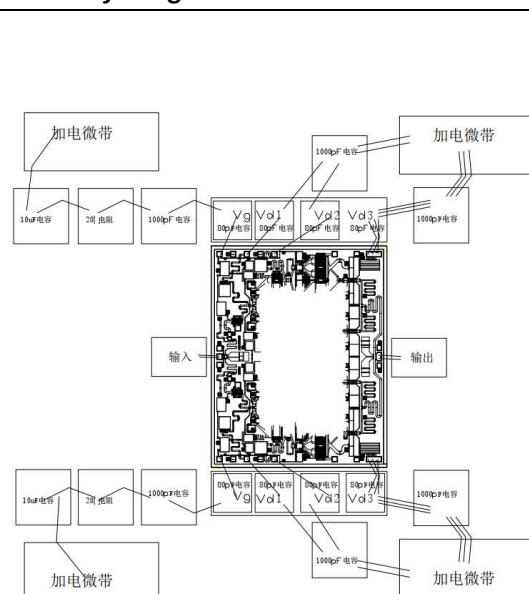
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	9V	
Id	Drain Current	6A	
Vg	Gate Voltage	-2V	
Ig	Gate Current	100mA	
Pd	DC Power Consumption	45W	
Pin	Input Power	28dBm	
Tch	Channel Temperature	175°C	
Tm	Mounting Temperature	310°C	30s, N2 Protection
Tstg	Storage Temperature	-65~150°C	

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


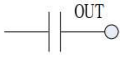
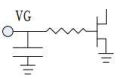
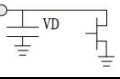
Outline Size (mm)



Assembly Diagram



Pads Definition

Number	Description	Equivalent Circuit
RFin	RF signal input, connect to 50 Ohm system, DC block capacitor is not needed.	
RFout	RF signal output, connect to 50 Ohm system, DC block capacitor is not needed.	
VG	Amplifier grid bias, external 1000pF capacitor is needed.	
VD1, VD2, VD3	Amplifier drain bias, external 100pF capacitor is needed.	
GND	Bottom has to be well connected with RF and DC.	