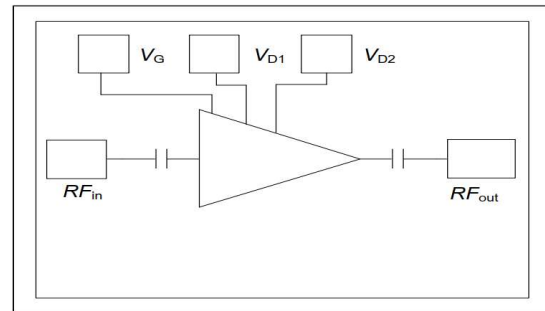


Performance

- Frequency: 2.0~4.0GHz
- Typical Signal Gain: 25.5dB
- Typical Pout: 29.5dBm
- Typical PAE: 27%
- Idq: 0.055A
- Id: 0.12A
- Bias: 28V, -2.6V (Typ.)
- Technology: 0.25um HEMT
- Size: 2.35*2mm*0.08mm

Function Diagram

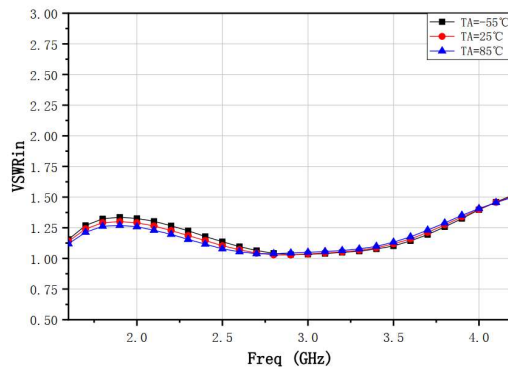


Electrical Specifications (TA=25°C, Vd=28V, Vg=-2.6V, F: 2.0~4.0GHz)

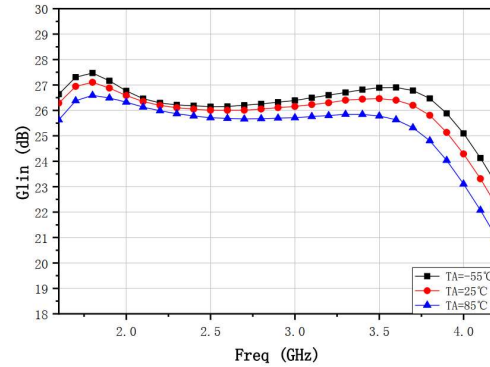
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	25.5	-	dB
Gp	Power Gain	-	23.5	-	dB
Pout	Saturated Power	-	29.5	-	dBm
Id	Operating Current		0.12		A
PAE	Power Added Efficiency	-	27	-	%

Test Curves (Vg=-2.6V, Vd=28V, Pin=-15dBm/6dBm, CW)

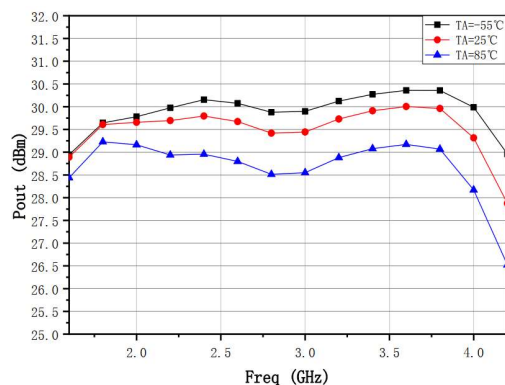
Input VSWR



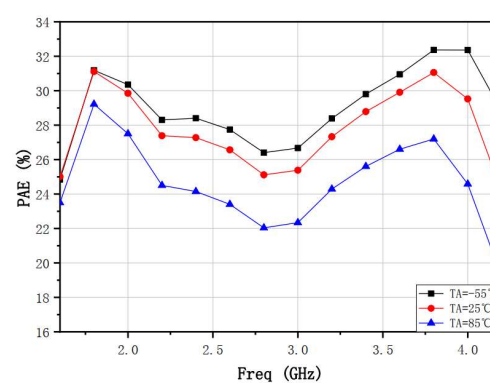
Small Signal Gain



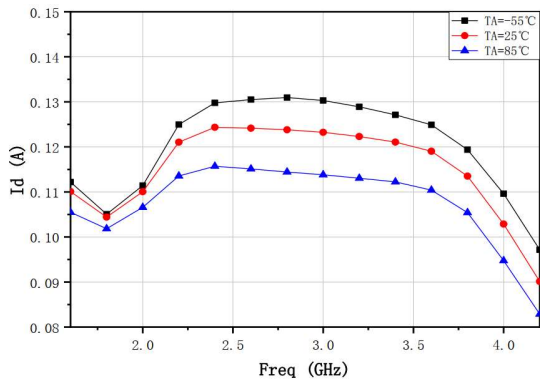
Output Power vs. Freq



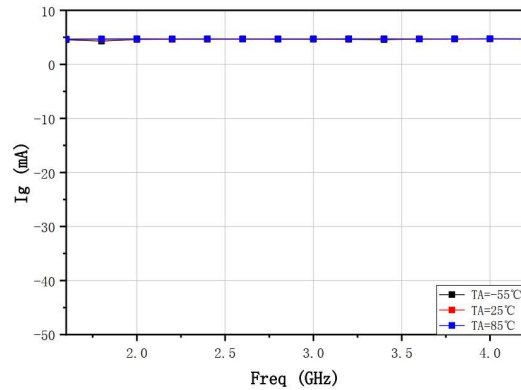
PAE vs. Freq



Drain Current



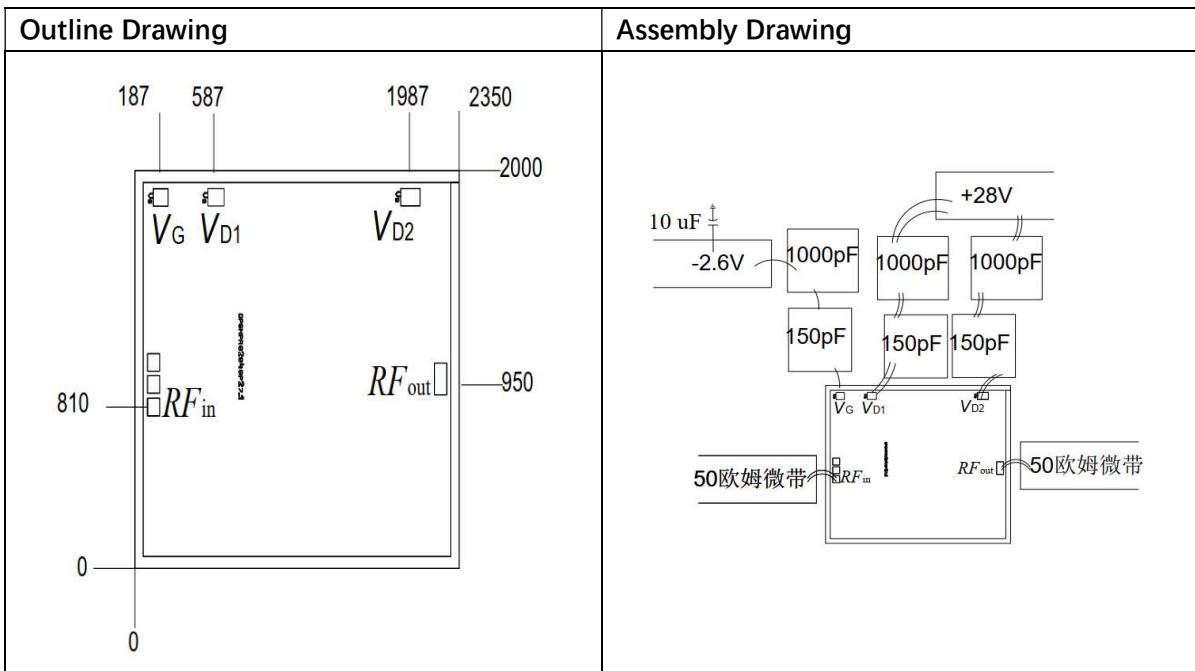
Gate Current




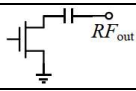
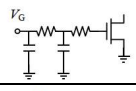
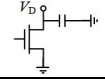
Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	30V	
Id	Drain Current	0.2A	
Pd	DC Power	2.5W	
Pin	Input Power	12dBm	
Tch	Channel Temperature	225°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.



Pads Definition

Pad	Description	Equivalent Circuit
RFin	RF Signal input, connect to 50ohm system, block capacitor is needed when there's external DC applied on this pad.	
RFout	RF Signal output, connect to 50ohm system, no need block capacitor	
VG	Amp gate bias, external 150pF, 1000Pf, 10uF capacitor is needed	
VD1, VD2	Amp drain bias, external 150pF, 1000pF capacitor is needed	
GND	Bottom must connect to RF and DC ground	