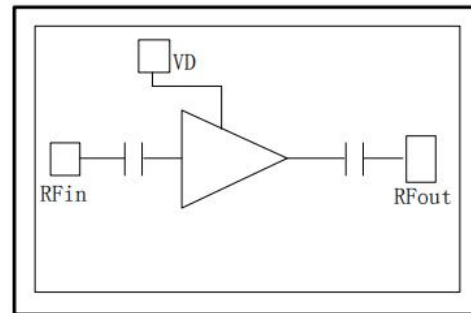


Performance

- Frequency: 8.5~10.5GHz
- Typical Signal Gain: 17dB
- Typical Pout: 28dBm@28V
- Typical PAE: 19%
- Technology: 0.25um HEMT
- Bias: 28V, Self Bias
- Mode: CW
- Size: 2.0*1.4mm*0.08mm

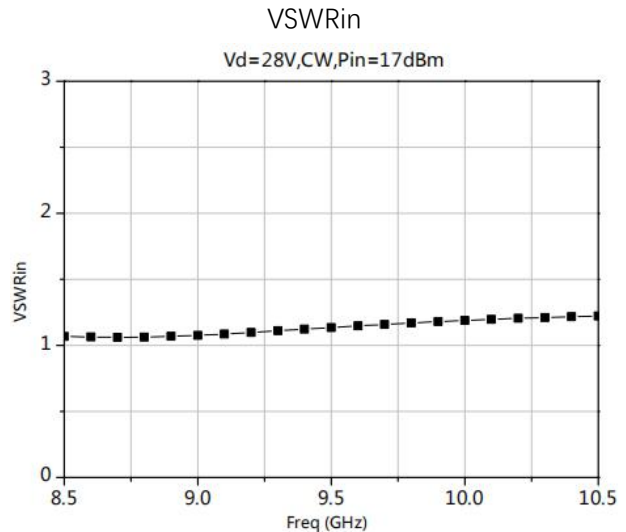
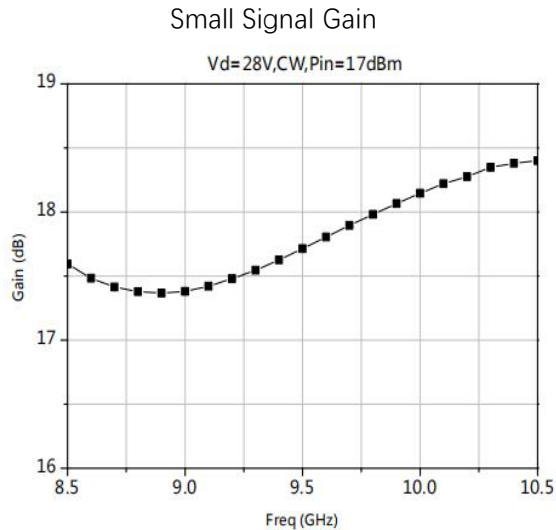
Function Diagram

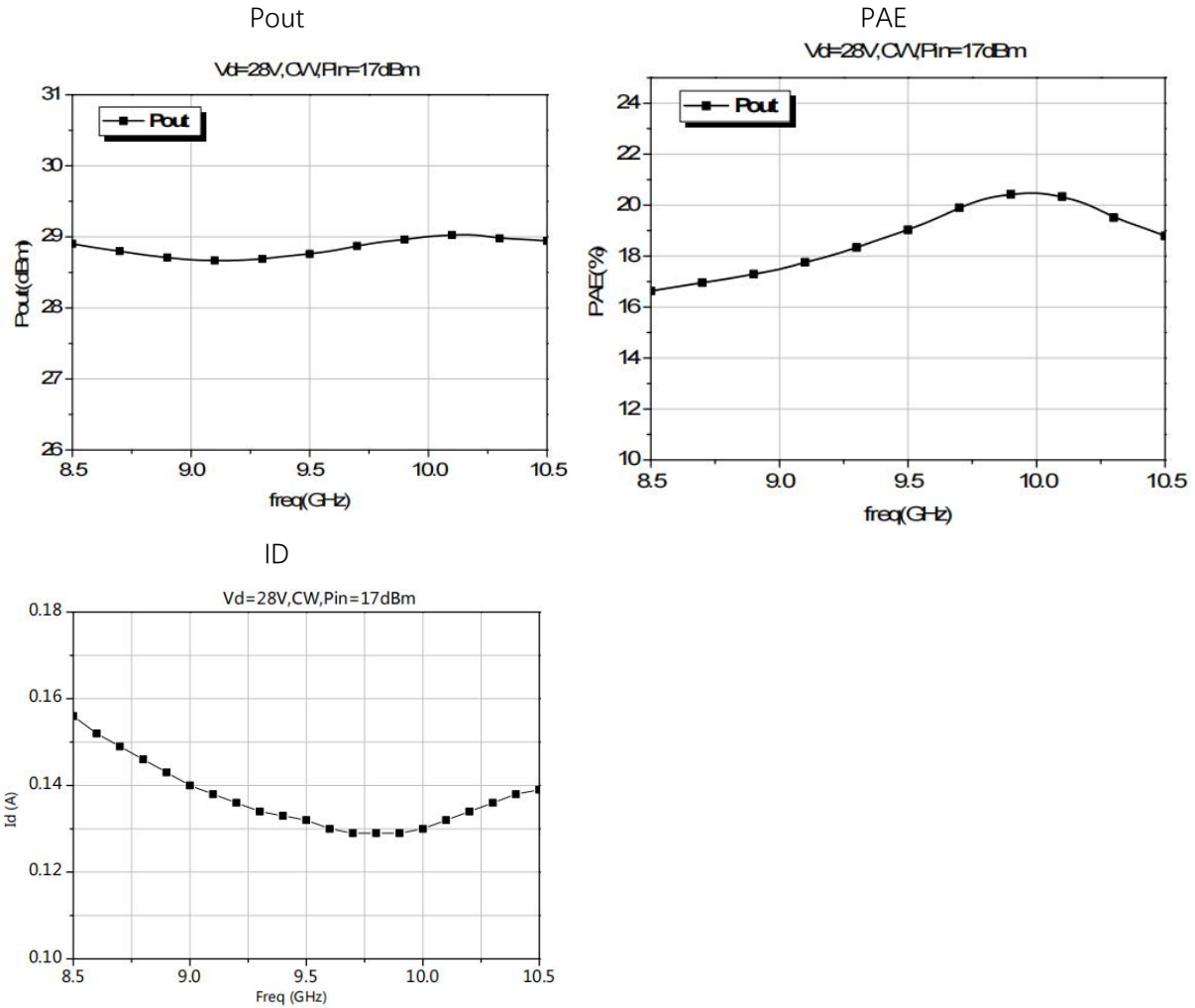


Electrical Specifications (TA=25°C, Vd=28V, F: 8.5~10.5GHz, CW)

Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	17.5	-	dB
Gp	Power Gain	-	11	-	dB
Pout	Saturated Power	-	29	-	dBm
PAE	Power Added Efficiency	-	19	-	%

Test Curves

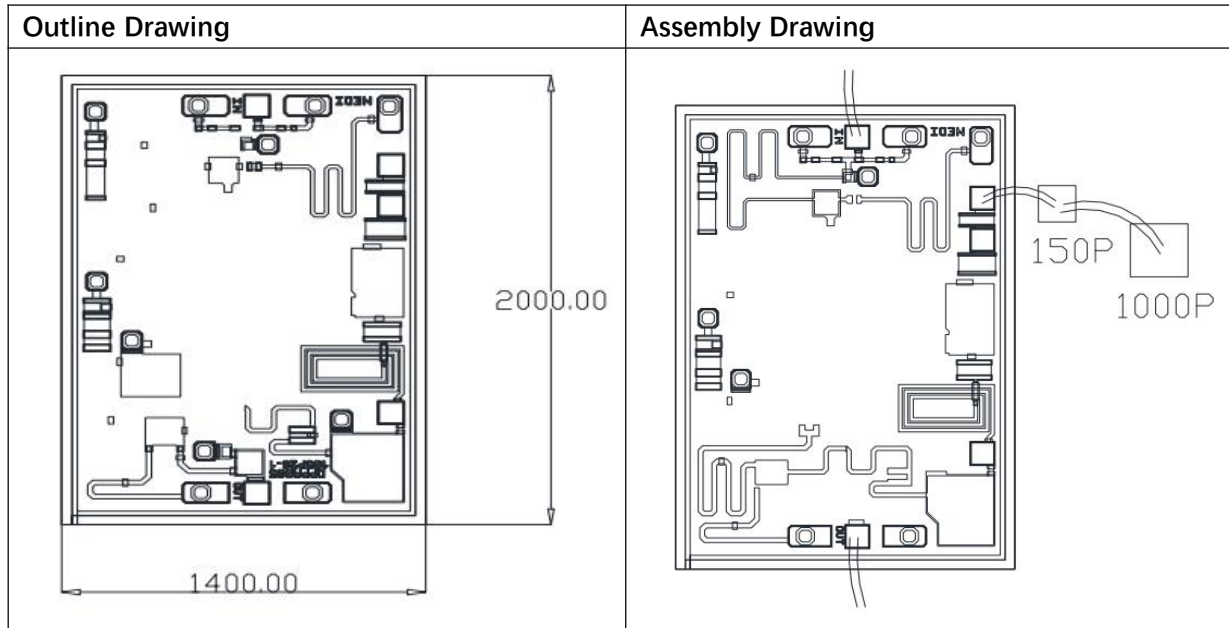




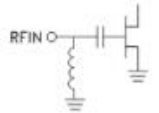
Absolute Max Ratings ($T_A = 25^\circ C$)

Symbol	Parameter	Value	Remark
V_d	Drain Voltage	32V	
P_d	DC Power	9.6W	
P_{in}	Input Power	20dBm	
T_{ch}	Channel Temperature	$225^\circ C$	
T_m	Mounting Temperature	$310^\circ C$	30 s, N ₂ Protection
T_{stg}	Storage Temperature	$-65 \sim 150^\circ C$	

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 if there's external DC applied on this pad.	
RFout	RF Signal output, connect to 50ohm system, no need block capacitor.	
VD	Amp drain bias, external 150pF, 1000pF capacitor is needed	
GND	Bottom must connect to RF and DC ground	