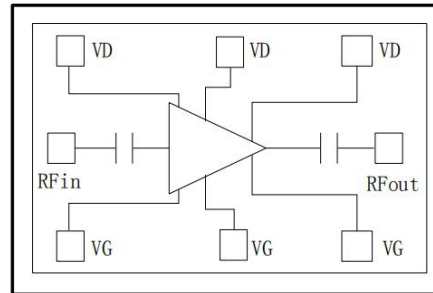


Performance

- Frequency: 92~96GHz
- Typical Signal Gain: 18dB
- Typical Pout: 23dBm@15V
- Typical PAE: 8%
- Bias: 15V, -1.5V(Typ.)
- Mode: CW
- Technology: 0.1um GaN HEMT
- Size: 3.68*1.34mm*0.05mm

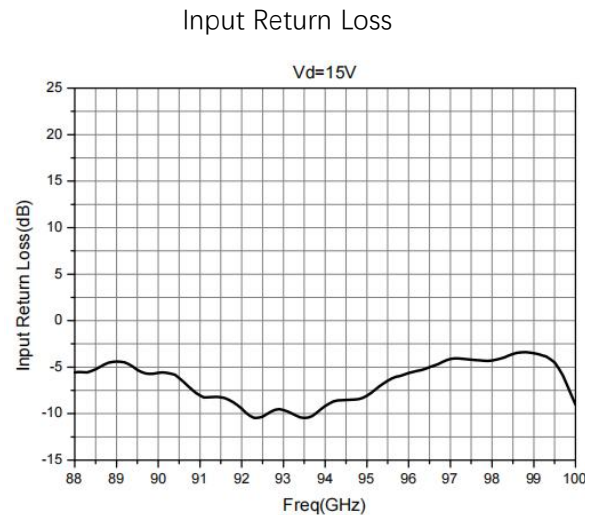
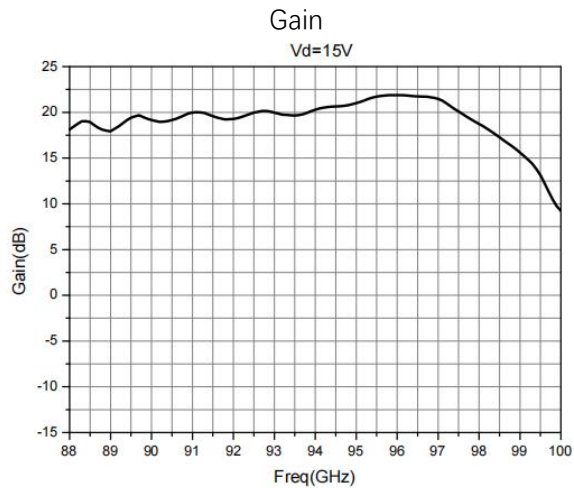
Function Diagram



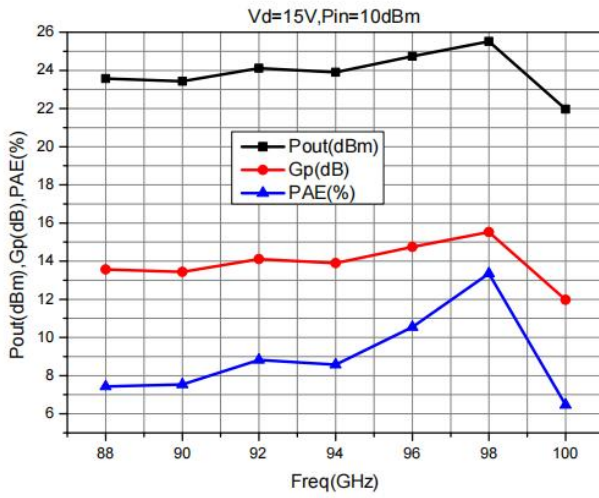
Electrical Specifications (TA=25°C, Vd=15V, Idq=0.18A, F:92~96GHz, CW)

Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	18	-	dB
Gp	Power Gain	13	-	-	dB
Pout	Saturated Power	23	-	-	dBm
PAE	Power Added Efficiency	-	8	-	%

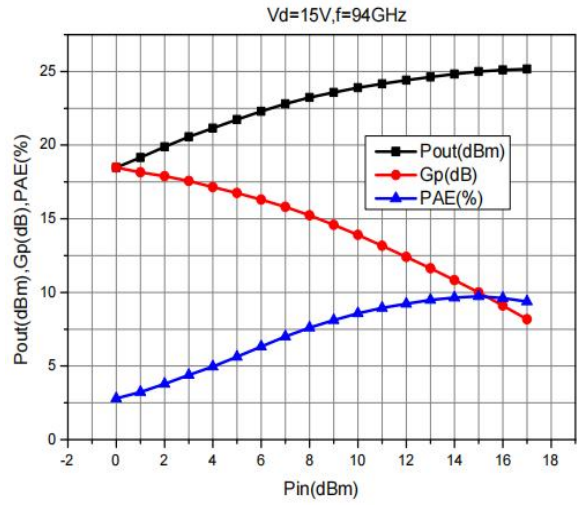
Test Curves



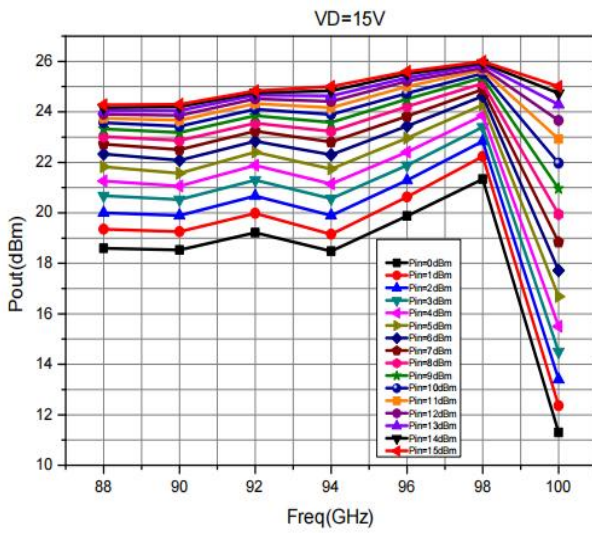
Pout, Gp, PAE



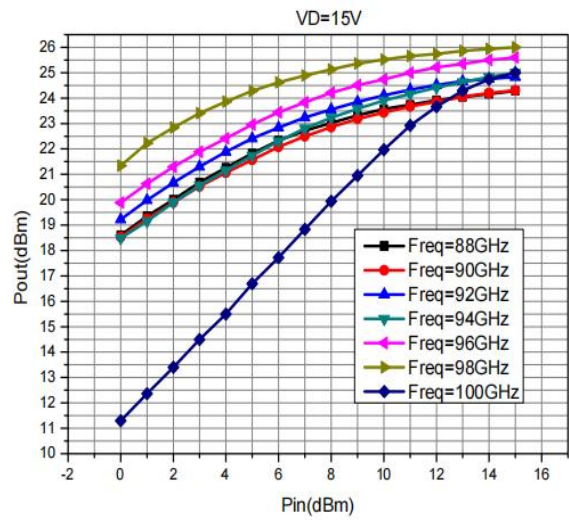
Pout, Gp, PAE



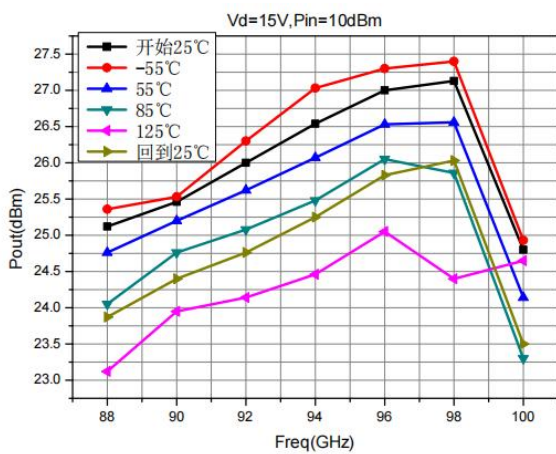
Pout@ Different Pin



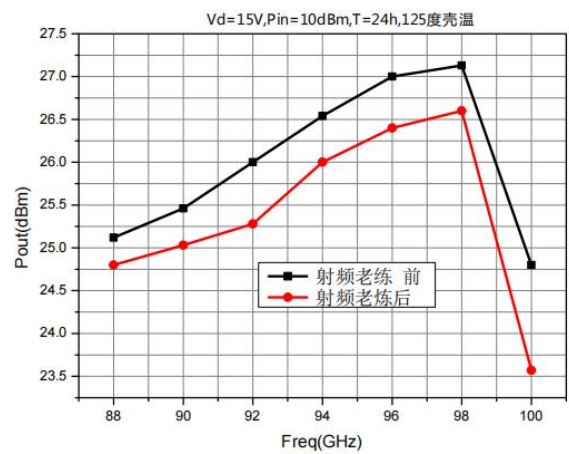
Pout@ Different Freq



Pout



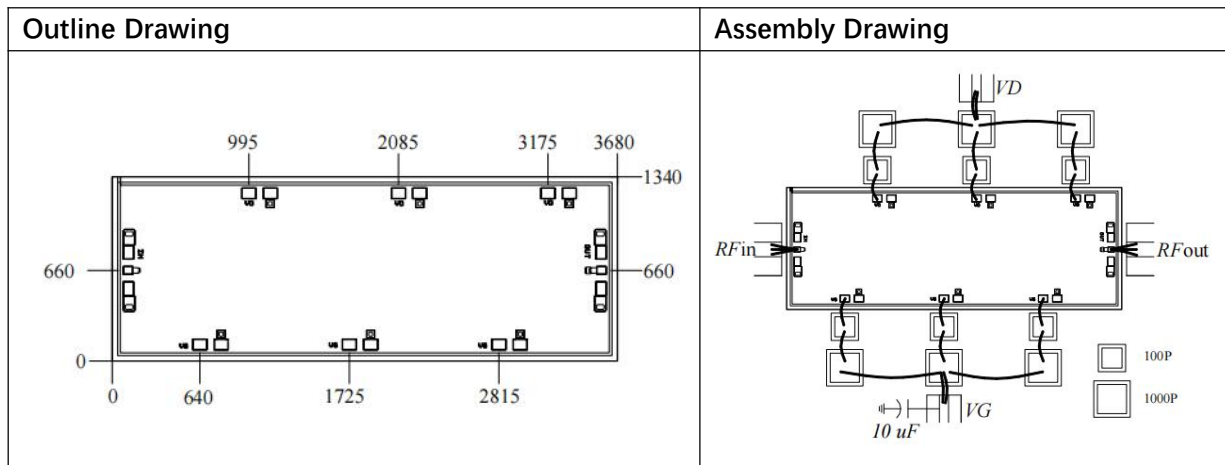
Pout




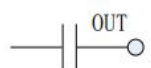
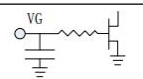
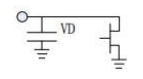
Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	20V	
Id	Drain Current	0.25A	
Vg	Gage Voltage	-4V	
Ig	Gate Current	10mA	
Pd	DC Power	5W	
Pin	Input Power	15dBm	
Tch	Channel Temperature	200°C	
Tm	Mounting Temperature	290°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~150°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, no need block capacitor.	
RFout	RF Signal output, connect to 50ohm system, no need block capacitor.	
VG	Amp gate bias, external 100pF, 1000pF capacitor is needed	
VD	Amp drain bias, external 100pF, 1000pF capacitor is needed	
GND	Bottom must connect to RF and DC ground	