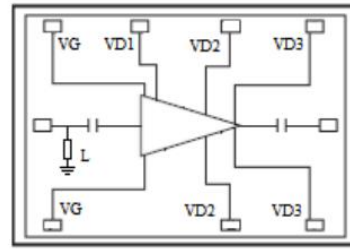


Performance

- Frequency: 15~17GHz
- Typical Signal Gain: 32dB
- Typical Pout: 41dBm
- Typical PAE: 48%
- Bias: 28V, 0.78A(Peak Current,D.C=10%)
- Technology: 0.2um HEMT
- Size: 2.3*1.9mm*0.08mm

Function Diagram

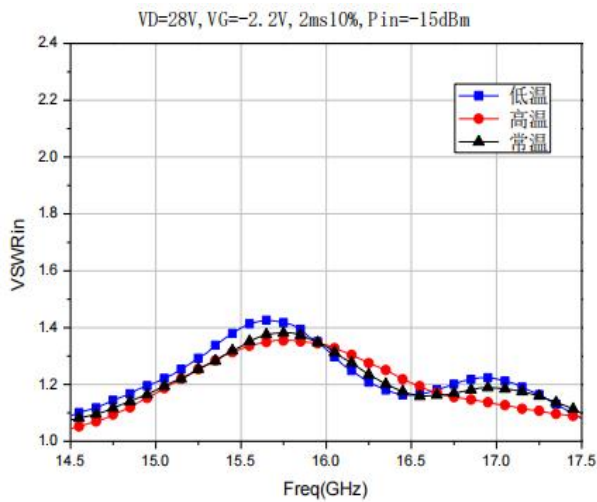


Electrical Specifications (TA=25°C, Vd=28V, Idq=0.78A, F:15~17GHz,PW=200us,D.C=10%)

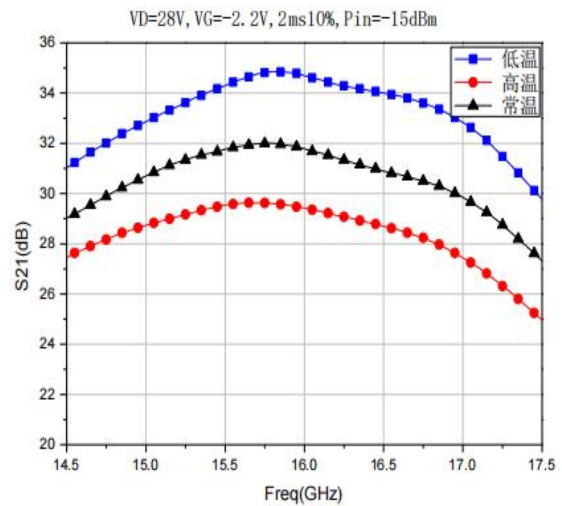
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	32	-	dB
Gp	Power Gain	-	22	-	dB
Pout	Saturated Power	-	41	-	dBm
PAE	Power Added Efficiency	-	48	-	%

Test Curves

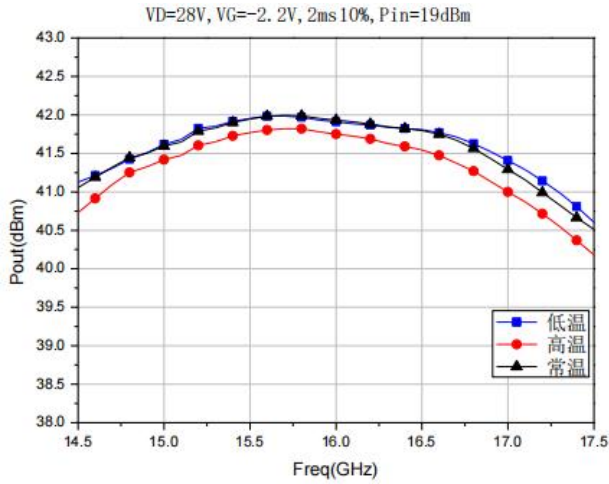
VSWRin@ Different Temp.



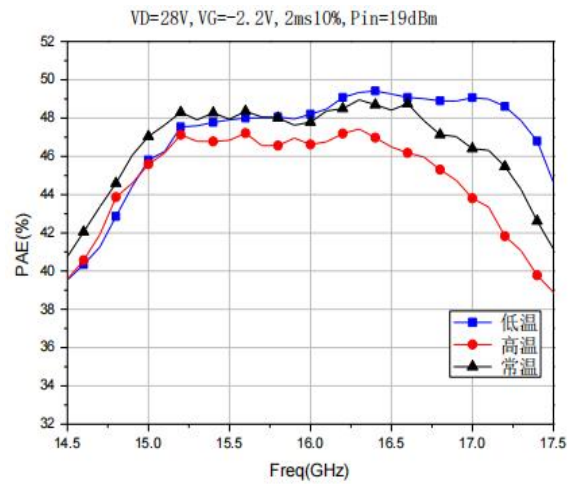
Small Signal Gain@ Different Temp.



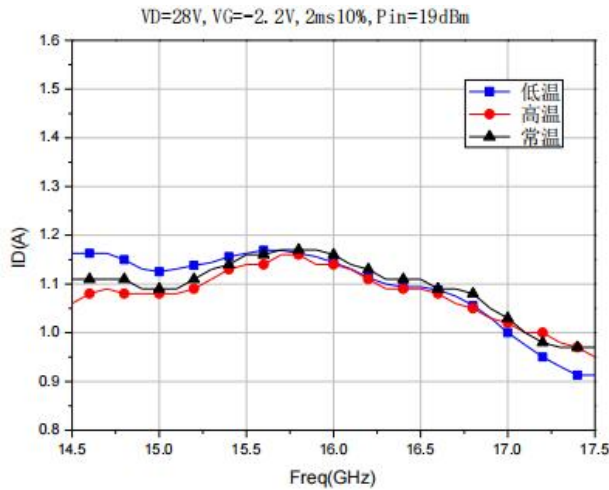
Pout @ Different Temp.



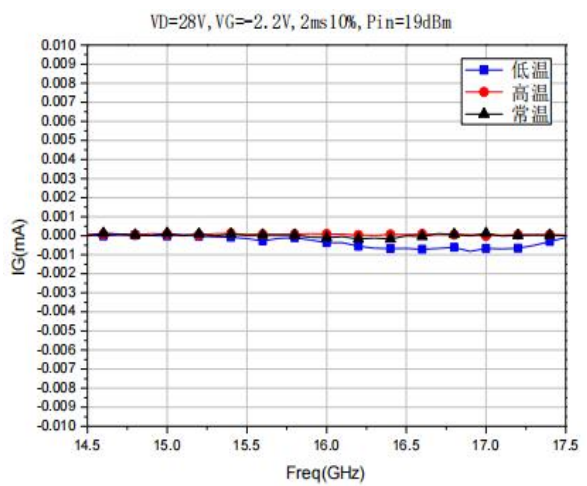
PAE @ Different Temp.



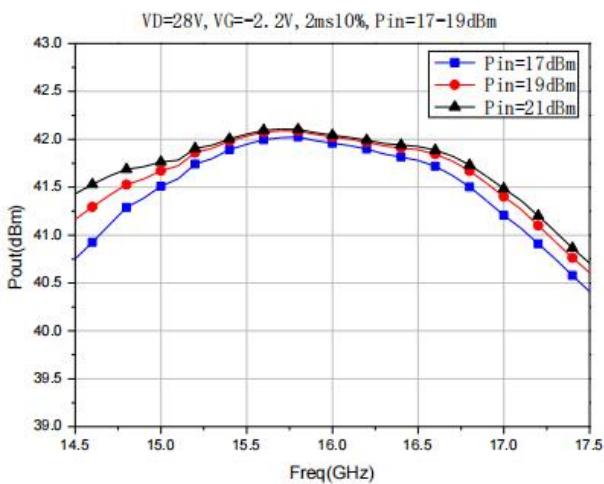
Id @ Different Temp



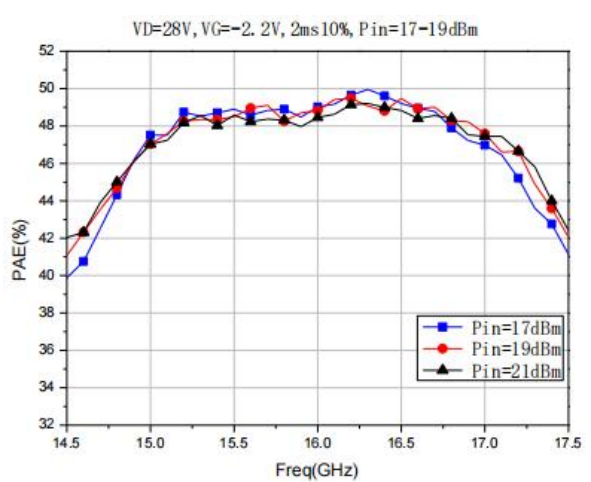
Ig @ Different Temp



Pout @ Different Pin



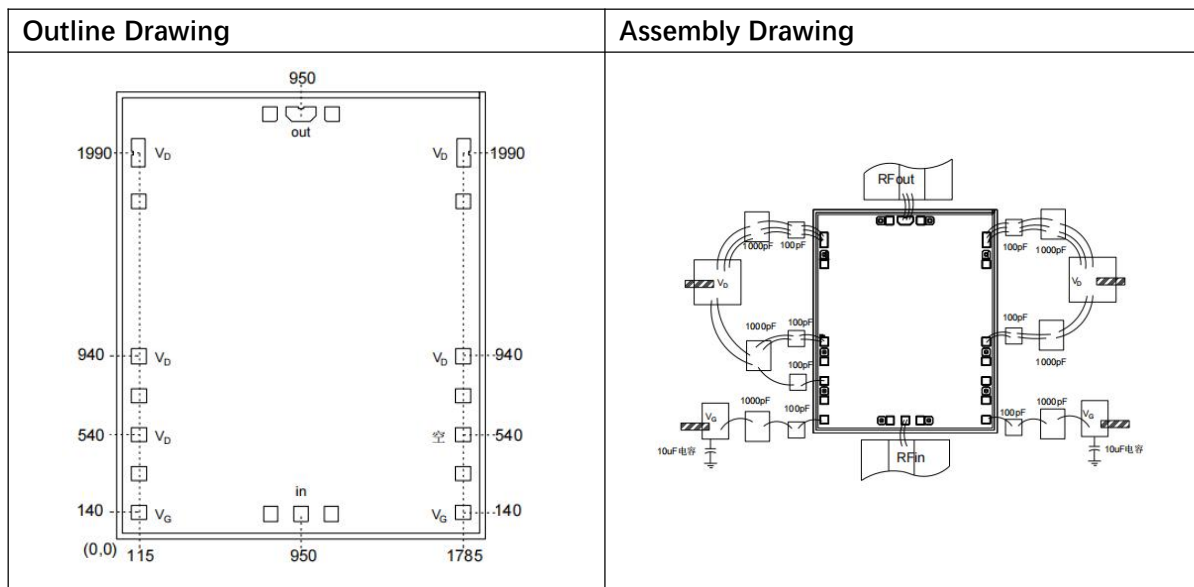
PAE @ Different Pin



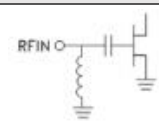

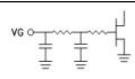

Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	32V	
Id	Drain Current	1.6A	Peak Current
Vg	Gate Voltage	-1.0V	
Ig	Gate Current	10mA	
Pd	DC Power	30W	Peak Power
Pin	Input Power	23dBm	
Tch	Channel Temperature	225°C	
Tm	Mounting Temperature	300°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, 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.	
VG	Amp gate bias, external 100pF, 1000pF capacitor is needed, bias power supply should be sufficiently decoupled with large capacitance.	
VD1、VD2、VD3	Amp drain bias, external 100pF, 1000pF capacitor is needed	
GND	Bottom must connect to RF and DC ground	