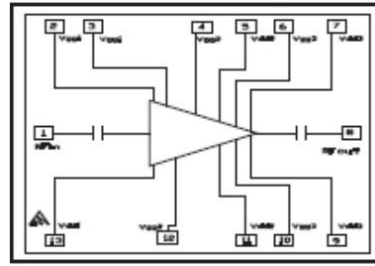


Performance

- Frequency: 14~18GHz
- Typical Signal Gain: 30dB
- Typical Pout: 42dBm@28V
- Typical PAE: 35%
- Bias: 28V, -2.0V (Typ.)
- Technology: 0.20um HEMT
- Size: 3.05*1.90mm*0.08mm

Function Diagram

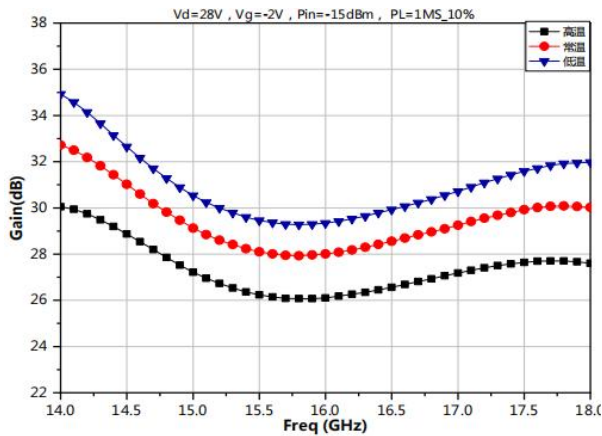


Electrical Specifications (TA=25°C, Vd=28V, Idq=1.2A, F:14~18GHz, PL)

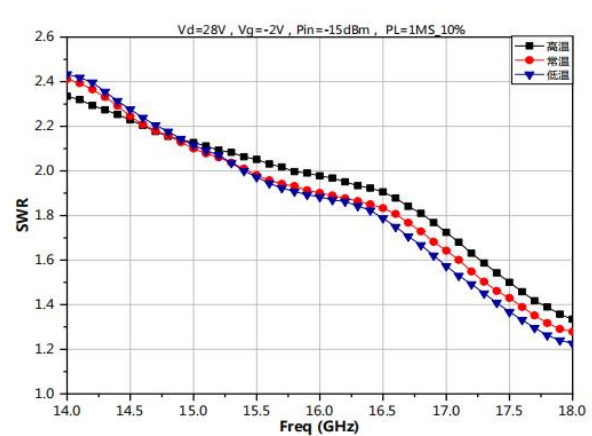
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	30	-	dB
Gp	Power Gain	-	22	-	dB
Pout	Saturated Power	-	42	-	dBm
PAE	Power Added Efficiency	-	35	-	%

Test Curves

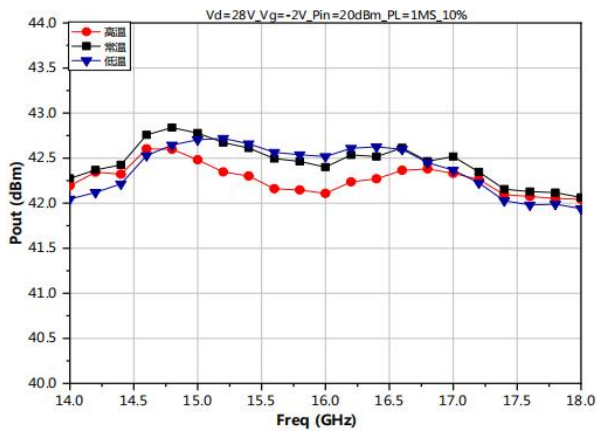
Small Signal Gain@ Different Temp



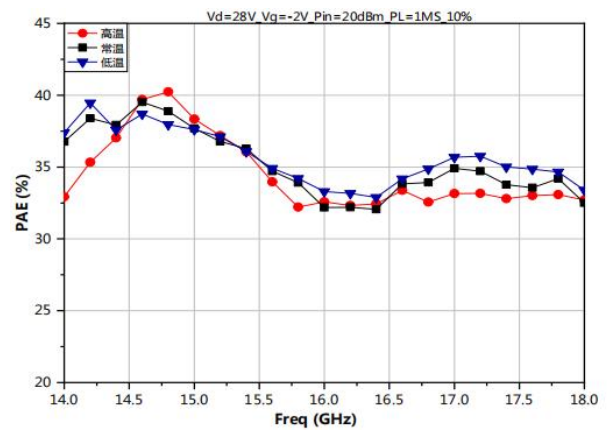
VSWRin@ Different Temp



Pout@ Different Temp



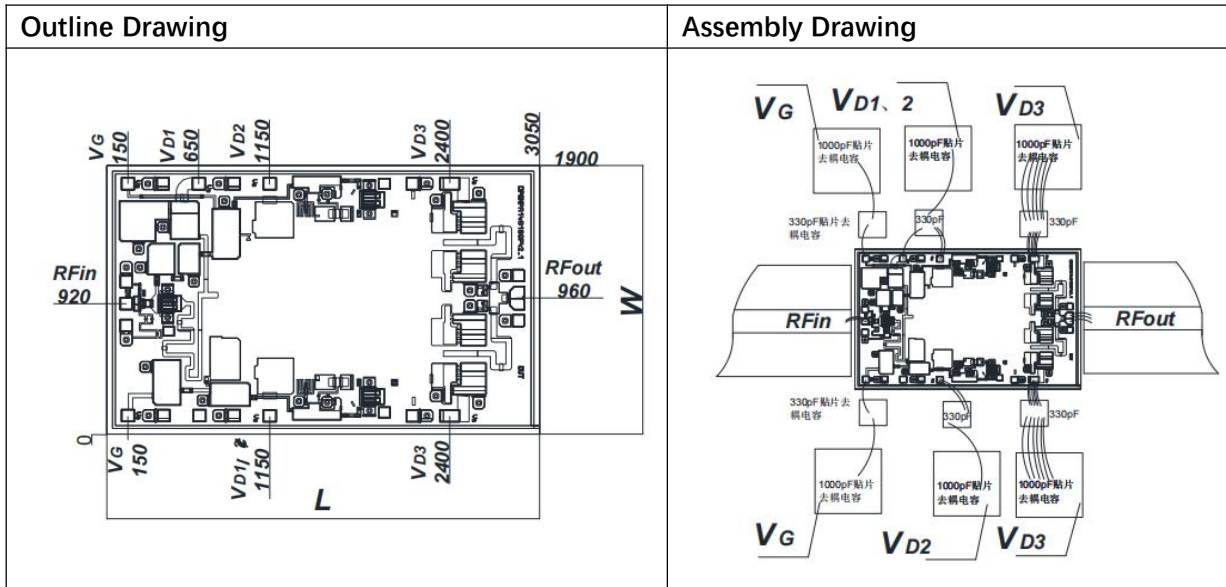
PAE@ Different Temp



Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	32V	
Id	Drain Current	3.0A	
Vg	Gage Voltage	-10V	
Ig	Gate Current	30mA	
Pd	DC Power	80W	
Pin	Input Power	21dBm	
Tch	Channel Temperature	175°C	
Tm	Mounting Temperature	310°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

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



Pads Definition

Pad	Description
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、VG1	Amp gate bias, external 1000pF capacitor is needed
VD、VD1、VD2、VD3、VD4	Amp drain bias, external 100pF capacitor is needed
GND	Bottom must connect to RF and DC ground