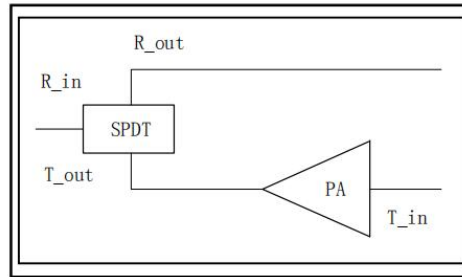


Performance

- Frequency: 2~12GHz
- Typical Signal Gain: 20dB
- Typical Pout: 39dBm
- Typical PAE: 20%
- Bias: 28V, -1.8 (Typ.)
- Technology: 0.25um HEMT
- Size: 4.3*3.6mm*0.08mm

Function Diagram

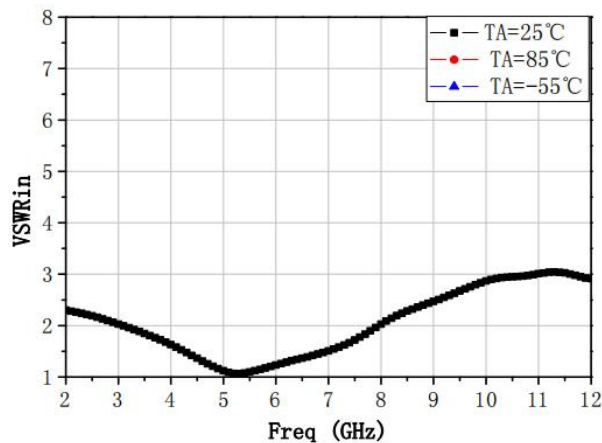


Electrical Specifications (TA=25°C, Vd=28V, Idq=1A, F: 2~12GHz)

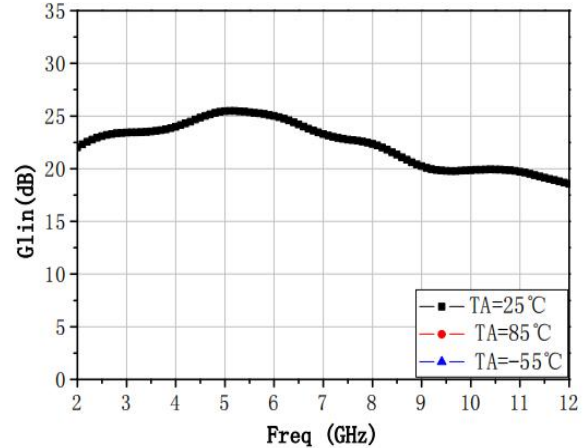
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	22	-	dB
Gp	Power Gain	-	16	-	dB
Pout	Saturated Power	-	39	-	dBm
PAE	Power Added Efficiency	-	22	-	%
Id	Dynamic current	-	1.5	-	A

Test Curves

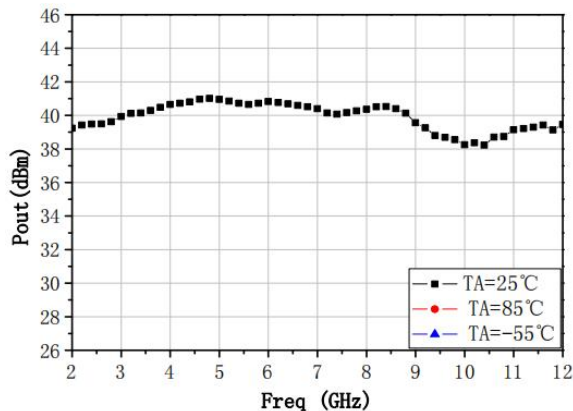
VSWRin@ Different Temp



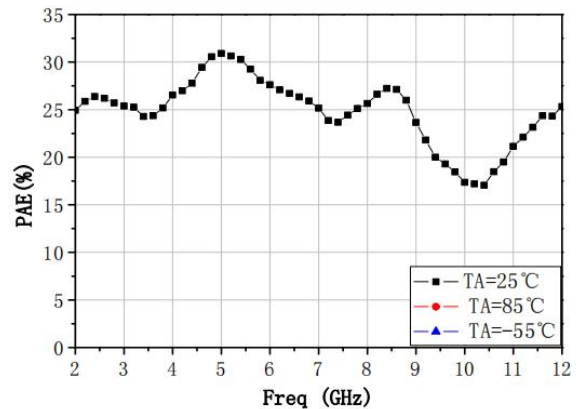
Small Signal Gain@ Different Temp



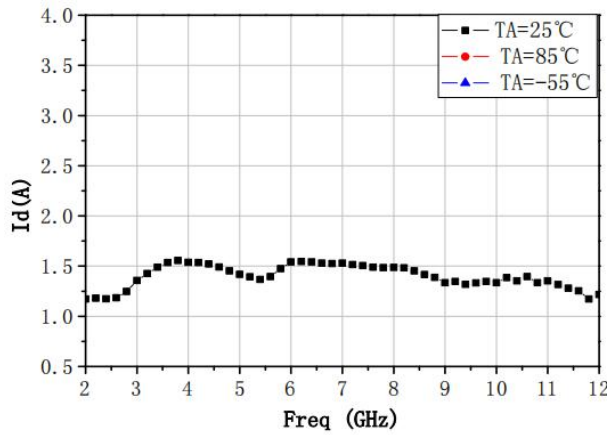
Pout@ Different Temp



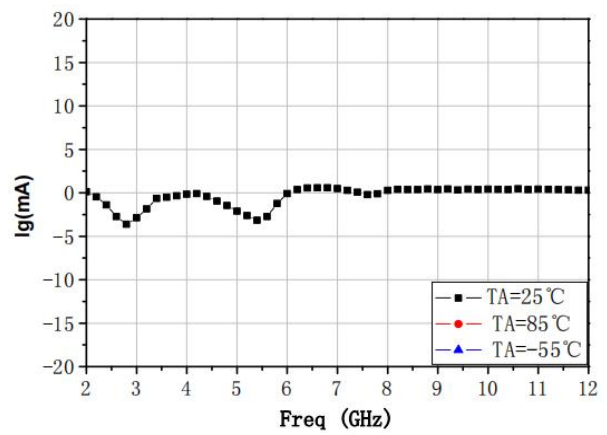
PAE@ Different Temp



Id@ Different Temp



Ig@ Different Temp

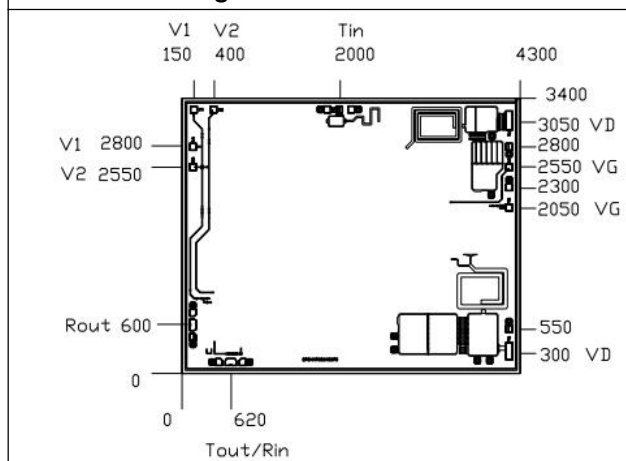


Absolute Max Ratings (TA=25°C)

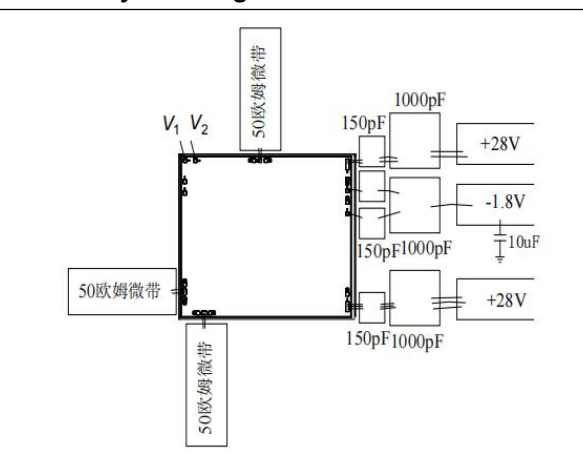
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	35V	
Id	Drain Current	3A	
Pd	DC Power	80W	
Pin	Input Power	32dBm	
Tch	Channel Temperature	225°C	
Tm	Mounting Temperature	310°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

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

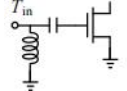
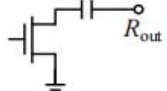
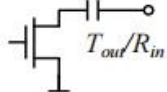
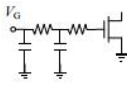
Outline Drawing



Assembly Drawing



Pads Definition

Pad	Description	Equivalent Circuit
Tin	Transmitting RF Signal output, connect to 50ohm system, no need block capacitor.	
RFout	Transmitting/Receiving common port, connect to 50ohm system, block capacitor is needed if there's external DC applied on this pad.	
Tout/RFin	Transmitting/Receiving RF Signal input, connect to 50ohm system, block capacitor is needed if there's external DC applied on this pad.	
VG	Amp gate bias, external 330pF, 1000pF capacitor is needed	
VD	Amp drain bias, external 330pF, 1000pF capacitor is needed	
GND	Bottom must connect to RF and DC ground	