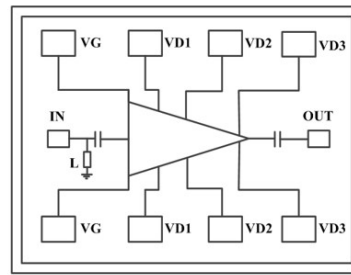


Performance

- Frequency: 8~12GHz
- Typical Small Signal Gain: 29dB
- Typical Pout: 47dBm @28V
- Typical PAE: 44%
- Typical Quiescent Current: 3.2A
- Bias: $V_d=28V$, $-1.8V$ (Typ)
- Size: 3.5*5.3mm*0.08mm

Function Diagram

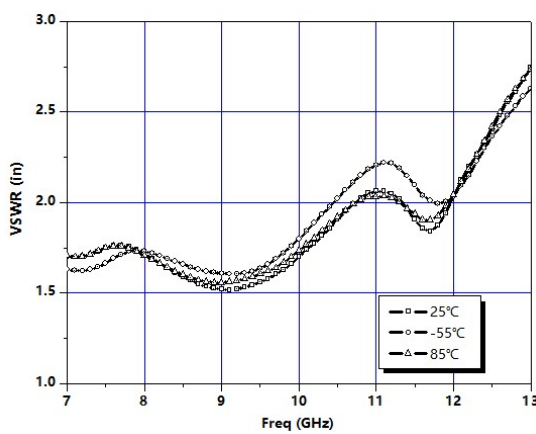


Electrical Specifications ($V_d=28V$, $V_g=-1.8V$, $I_{dq}=3.2A$, F: 8~12GHz, Pulse width: 100us, D.C 10%)

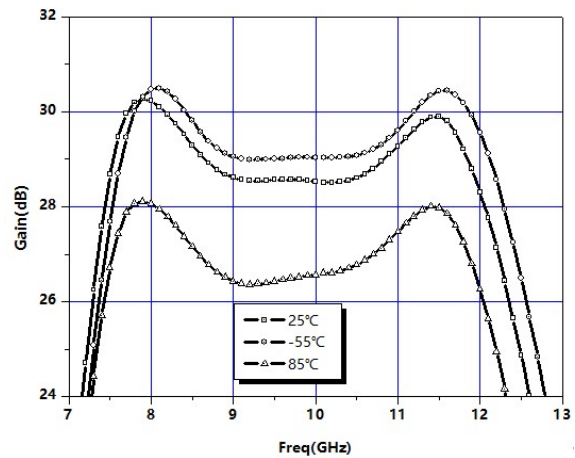
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	29	-	dB
Gp	Power Gain	-	19	-	dB
Pout	Saturated Power	-	47	-	dBm
PAE	Power Added Efficiency	-	44	-	%

Test Curves ($V_d=28V$, $V_g=-1.8V$, Pulse width: 100us, D.C 10%)

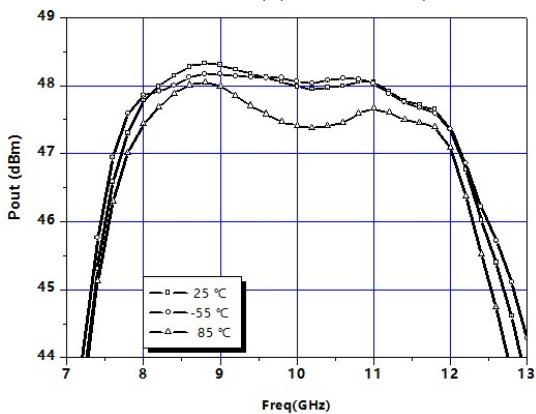
Input VSWR vs. Freq ($P_{IN}=-10dBm$)



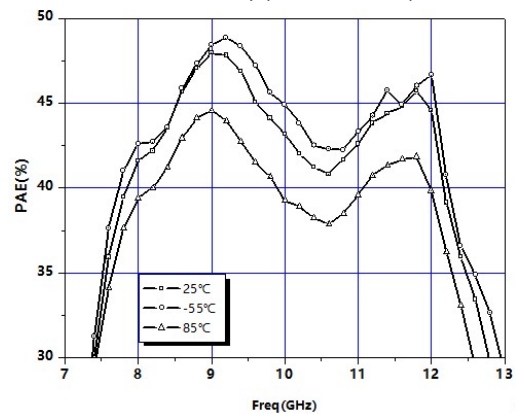
Gain vs. Freq ($P_{IN}=-10dBm$)



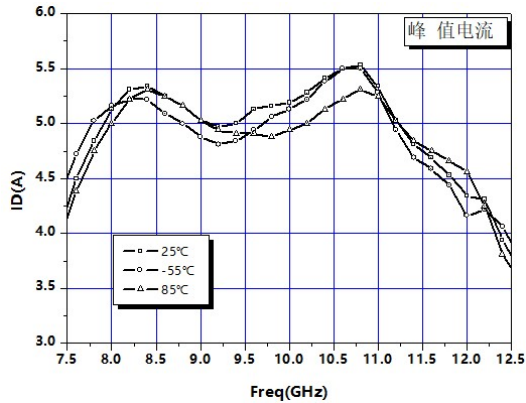
Pout vs. Freq ($P_{IN}=28dBm$)



PAE vs. Freq ($P_{IN}=28dBm$)



Drain Current vs. Freq (P_{IN}=28dBm)

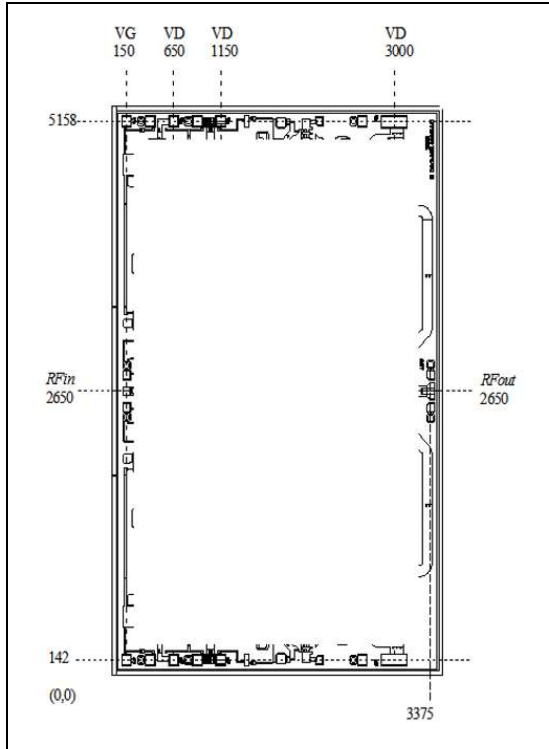


Absolute Max Ratings (T_A=25°C)

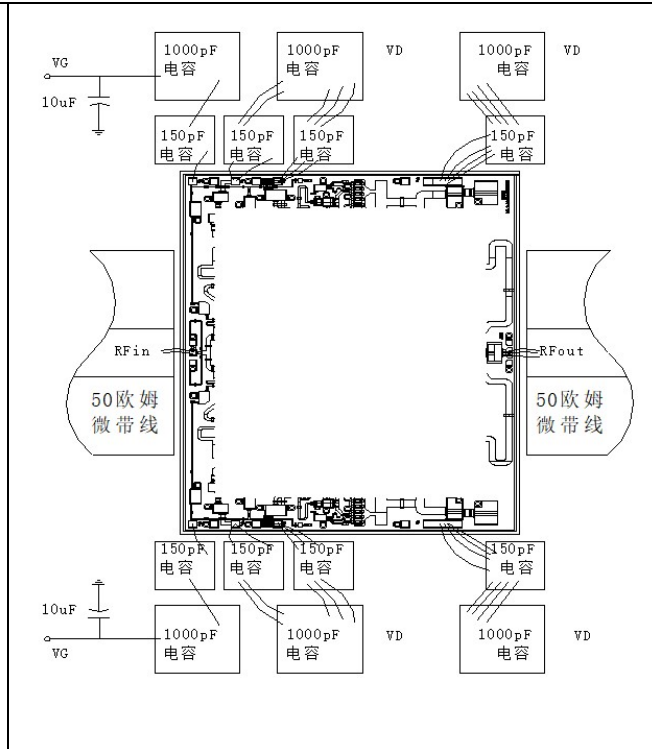
Symbol	Parameter	Value	Remark
V _d	Drain Voltage	32 V	
V _{gs}	Gate Voltage	-5V	
P _d	DC Power	130 W	25°C
T _{ch}	Channel Temperature	225°C	
T _{stg}	Storage Temperature	-55~+175°C	
T _m	Mounting Temperature	300°C	1min, N ₂ Protection
T _c	Operating Temperature	-55~+85°C	

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

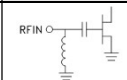
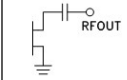
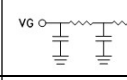
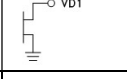
Outline Size (um)



Assembly Application



Pin Definition

Pin	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	Amp gate bias, external 150pF,1000pF capacitor is needed	
VD1、VD2、VD3	Amp drain bias, external 150pF,1000pF capacitor is needed	
GND	Bottom must connect to RF and ground	