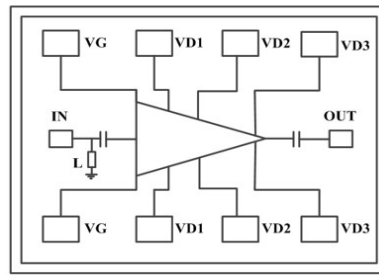


Performance

- Frequency: 8~12GHz
- Typical Small Signal Gain: 30dB
- Typical Pout: 47dBm @28V
- Typical PAE: 48%
- Typical Idq: 2.8A
- Bias: $V_d=28V$, $-2.1V$ (Typ)
- Size: 3.5*5.3mm*0.08mm

Function Diagram

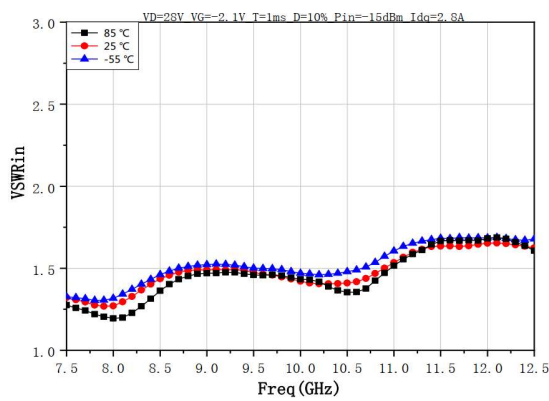


Electrical Specifications ($V_d=28V$, $V_g=-2.1V$, $I_{dq}=2.8A$, F: 8~12GHz, Pulse width: 1ms, D.C 10%)

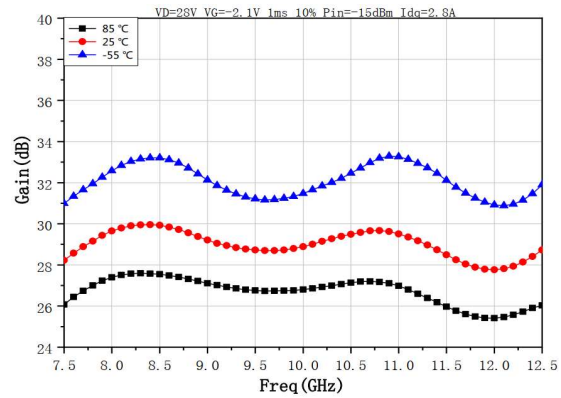
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	30	-	dB
Gp	Power Gain	-	19	-	dB
Pout	Saturated Power	-	47	-	dBm
PAE	Power Added Efficiency	-	48	-	%

Test Curves

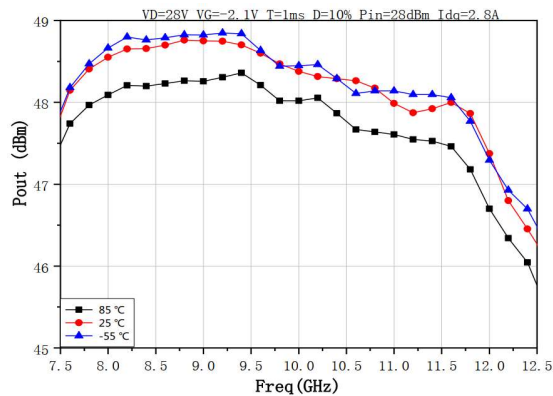
Input VSWR vs. Freq



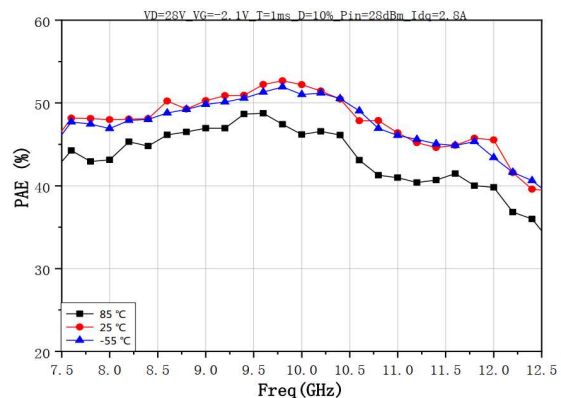
Linear Gain vs. Freq



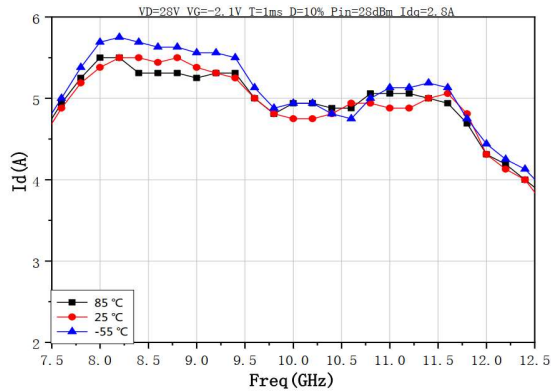
Pout vs. Freq



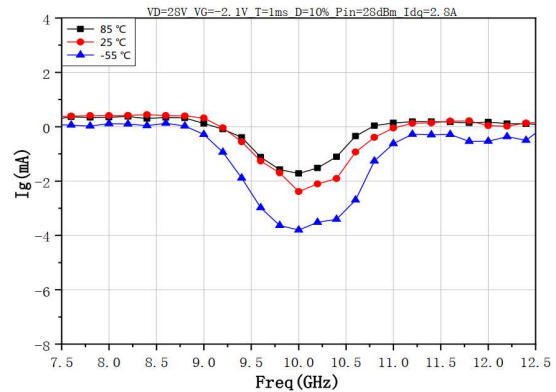
PAE vs. Freq



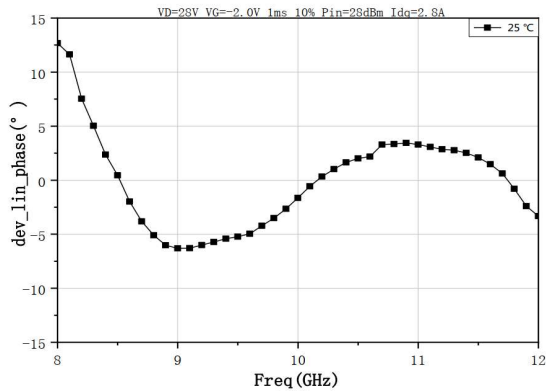
Drain Current vs. Freq



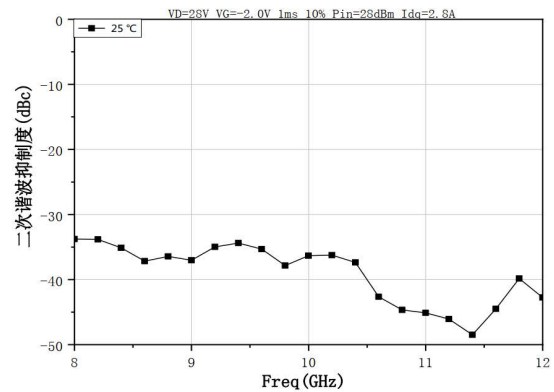
Grid Current vs. Freq



Div_Lin_Phase vs. Freq



2nd Harmonic vs. Freq

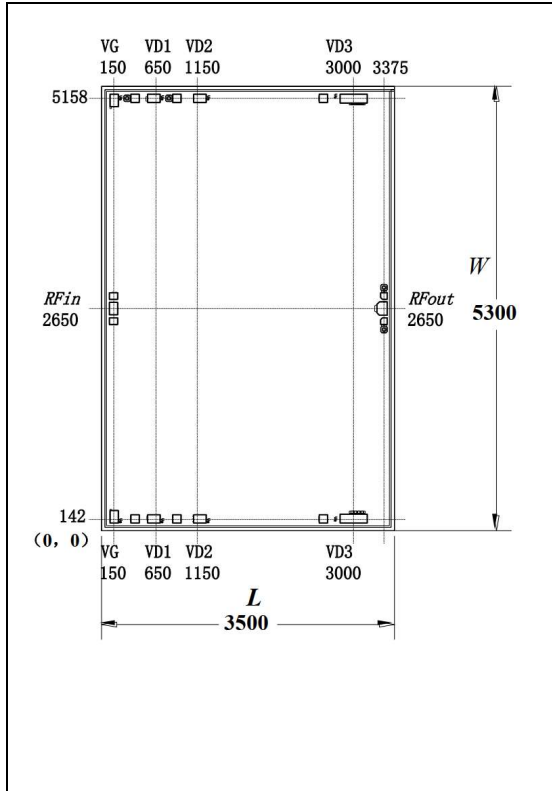


Absolute Max Ratings (TA=25°C)

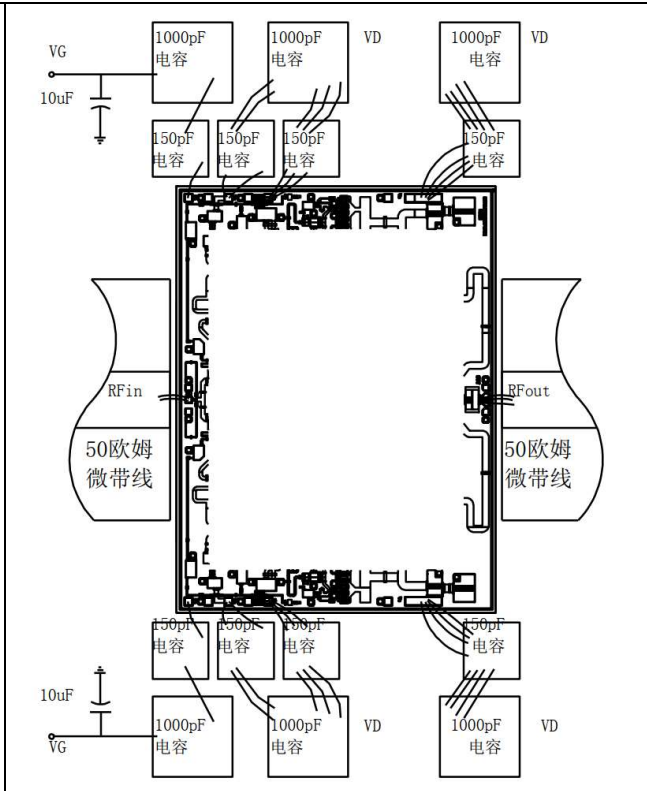
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	32 V	
Vgs	Gate Voltage	-5V	
Pd	DC Power	130 W	25°C
Tch	Channel Temperature	225°C	
Tstg	Storage Temperature	-55~+175°C	
Tm	Mounting Temperature	300°C	1min, N2 Protection
Tc	Operating Temperature	-55~+85°C	

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

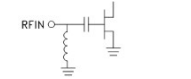
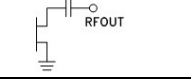
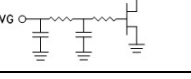

Outline Size (um)



Assembly Application



Pin Definition

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