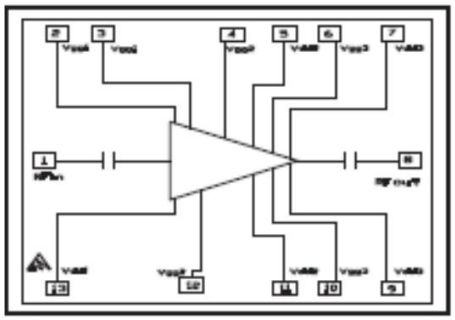
Performance

- Frequency: 3.7~4.2GHz
- Typical Signal Gain: 27dB
- Typical Pout: 37dBm@28V
- Typical PAE: 50%
- Bias: 28V, -2.6V, 75mA (Typ.)
- Mode: CW
- Technology: 0.15um HEMT
- Size: 1.41*2.36mm*0.08mm

Function Diagram

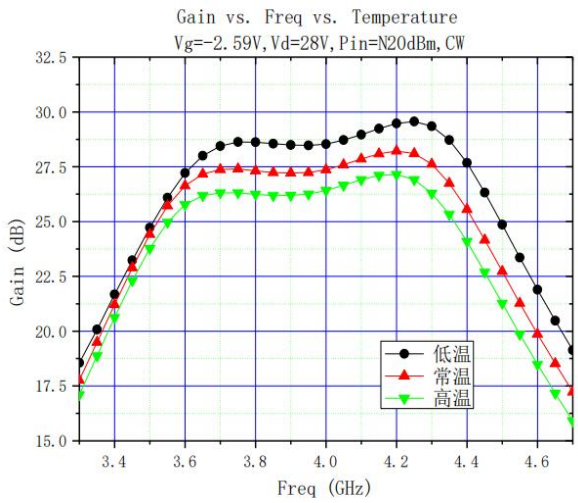


Electrical Specifications (T_A=25℃,CW)

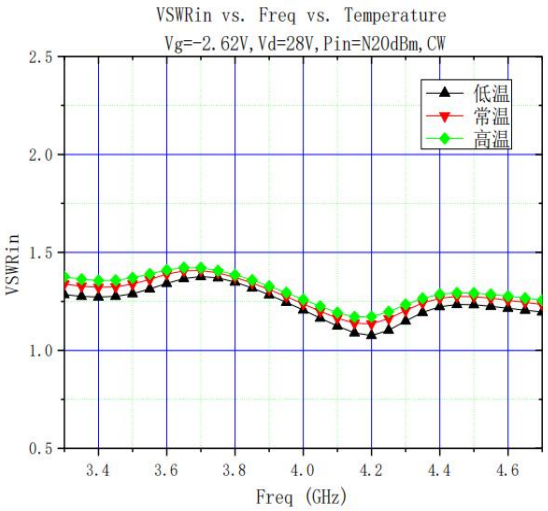
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	27	-	dB
Gp	Power Gain	-	19	-	dB
Pout	Saturated Power	-	37	-	dBm
PAE	Power Added Efficiency	-	50	-	%
R	Thermal Resistance	-	-	-	℃/W

Test Curves

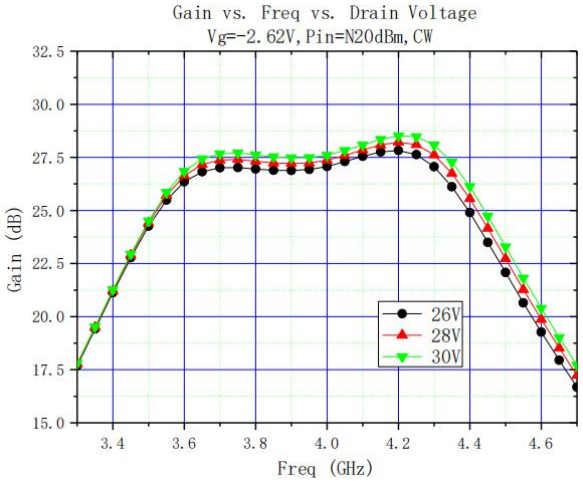
Small Signal Gain@ Different Temp



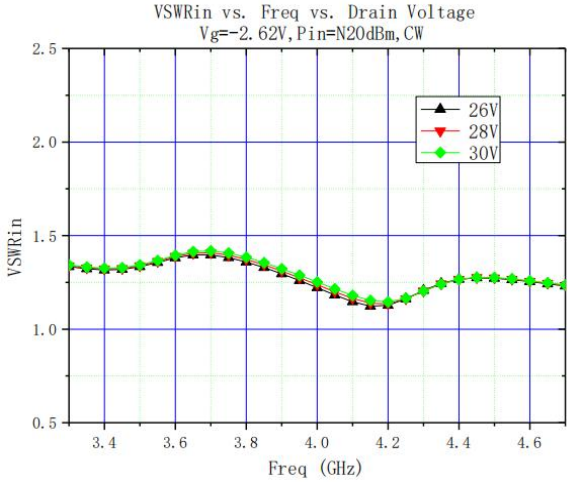
VSWRin@ Different Temp



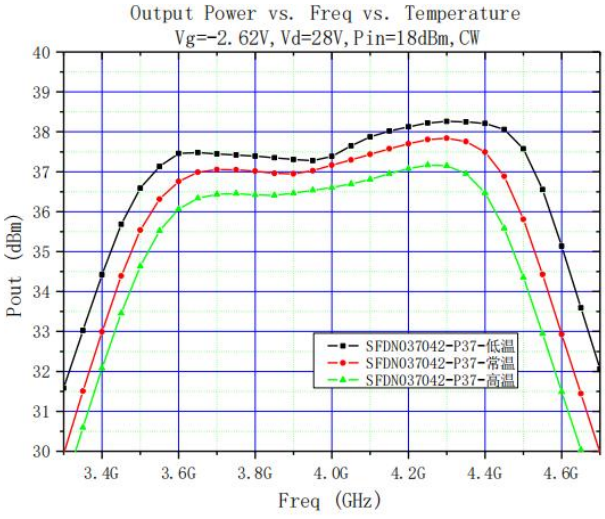
Small Signal Gain@ Different Vd



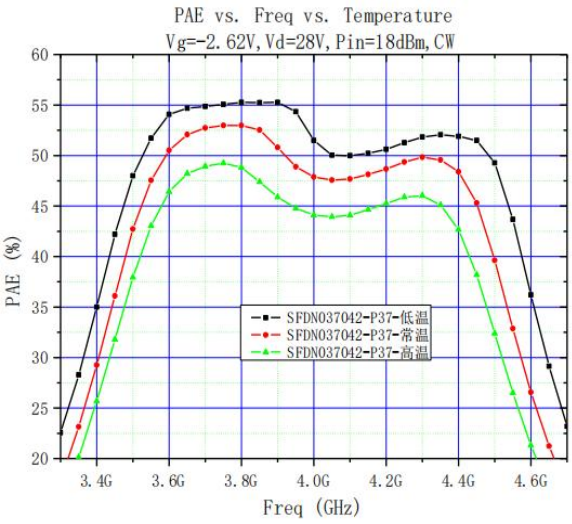
VSWRin@ Different Vd



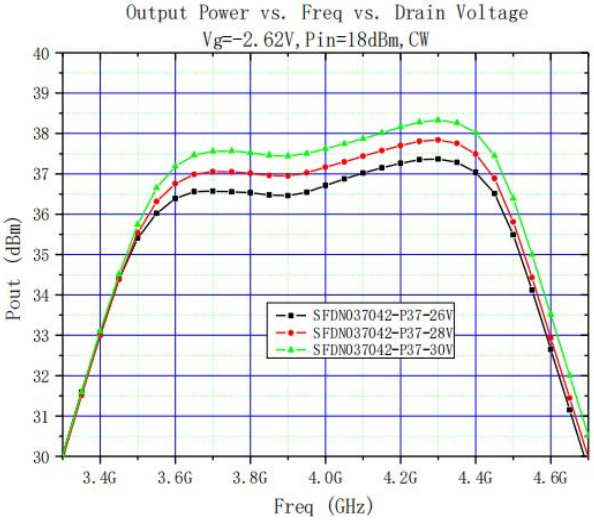
Pout@ Different Temp



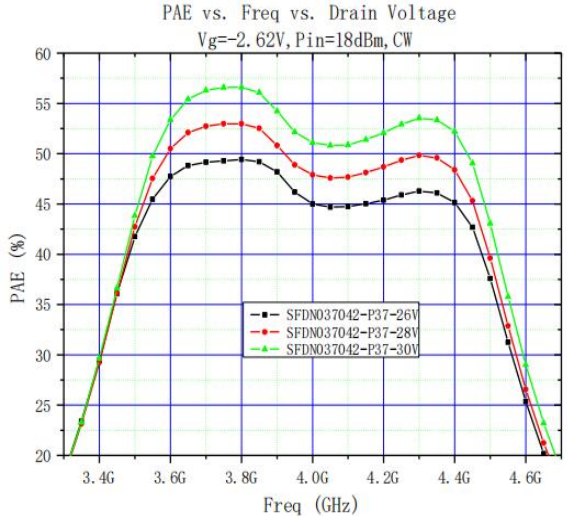
PAE@ Different Temp



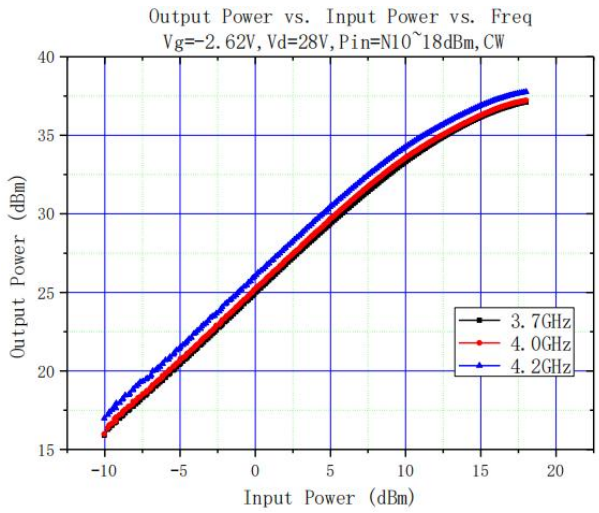
Pout@ Different Vd



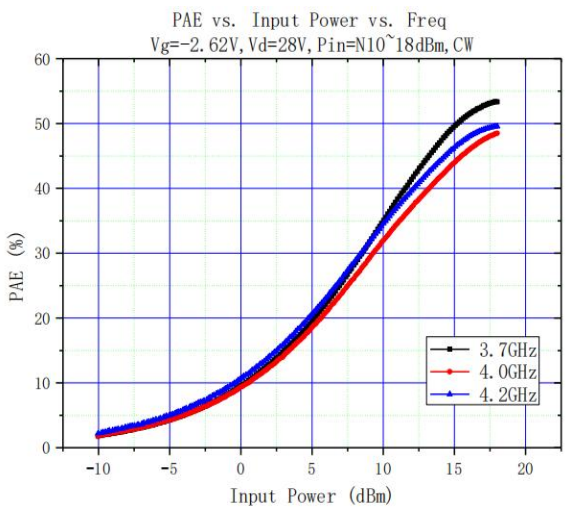
PAE@ Different Vd



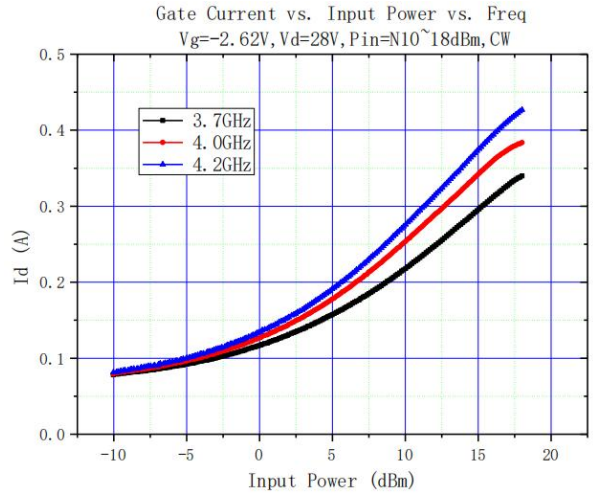
Pout@ Different Pin



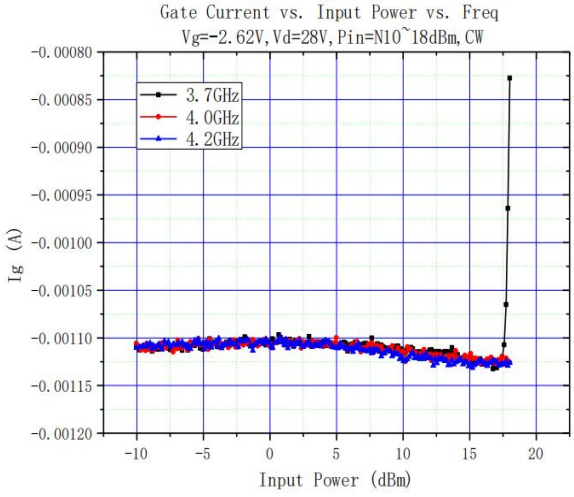
PAE@ Different Pin



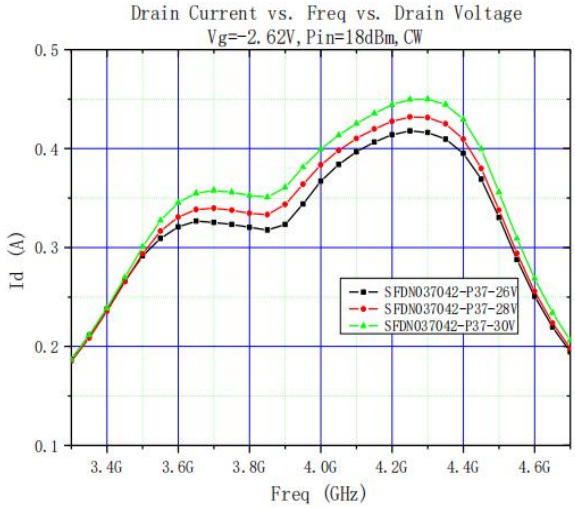
Id@ Different Pin



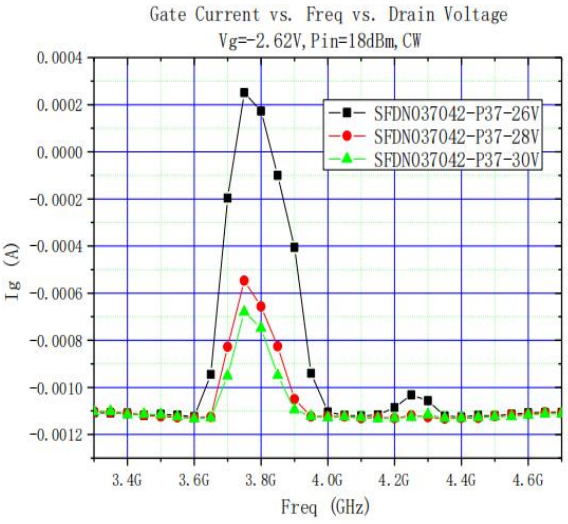
Ig@ Different Pin



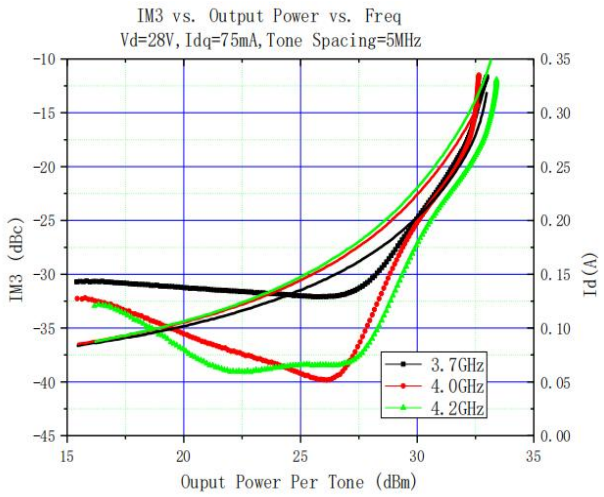
Id@ Different Vd



Ig@ Different Vd



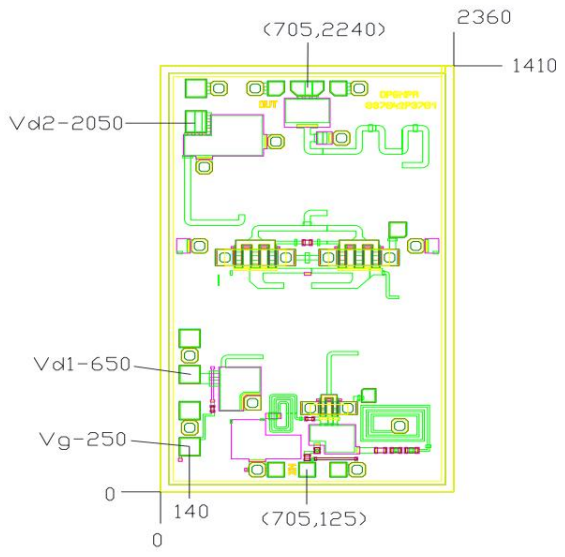
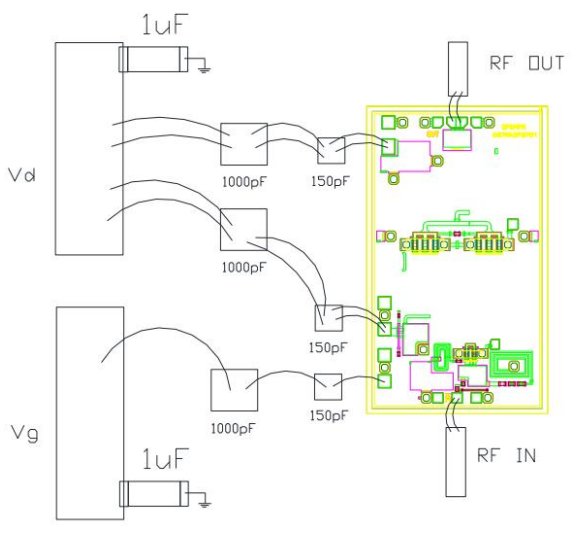
IM3 VS Pout/Per tone



Absolute Max Ratings (T_A=25℃)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	32V	
Id	Drain Current	5.0A	
Vg	Gage Voltage	-10V	
Ig	Gate Current	10mA	
Pd	DC Power	110W	
Pin	Input Power	28dBm	
Tch	Channel Temperature	175℃	
Tm	Mounting Temperature	310℃	1 min, N_2 Protection
Tstg	Storage Temperature	-55~175℃	

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

Outline Drawing	Assembly Drawing
	

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 150pF capacitor is needed
GND	Bottom must connect to RF and DC ground