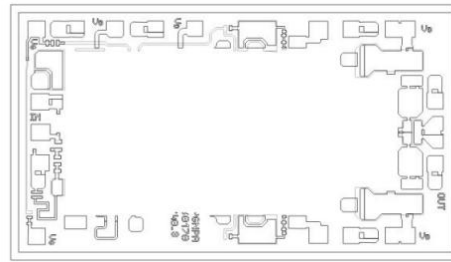


Performance

- Frequency: 15~17GHz
- Typical Signal Gain: 32dB
- Typical Pout: 42dBm@28V
- Typical PAE: 38%
- Bias: 28V, -2.2V
- Technology: 0.25um HEMT
- Size: 2.3*1.9mm*0.08mm

Function Diagram

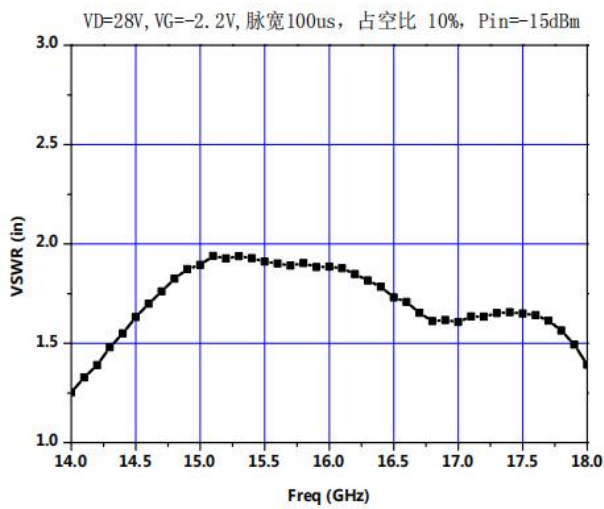


Electrical Specifications ($T_A=25^\circ\text{C}$, $V_d=28\text{V}$, $V_g=-2.2\text{V}$, $I_{dq}=0.9\text{A}$, $F:15\sim17\text{GHz}$, $PW=100\mu\text{s}$, $D.C=10\%$)

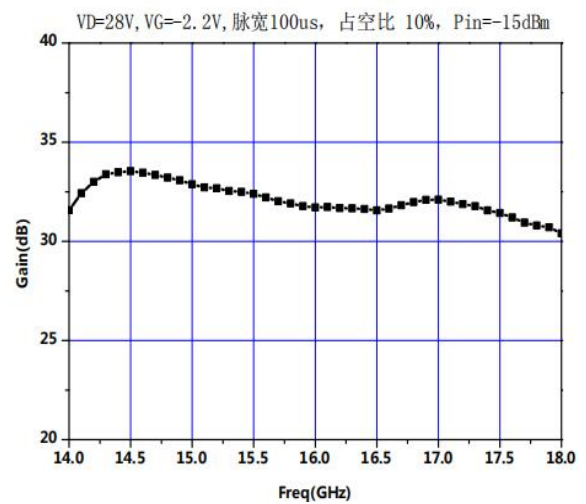
Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	32	-	dB
Gp	Power Gain	-	21	-	dB
Pout	Saturated Power	-	42	-	dBm
PAE	Power Added Efficiency	-	38	-	%

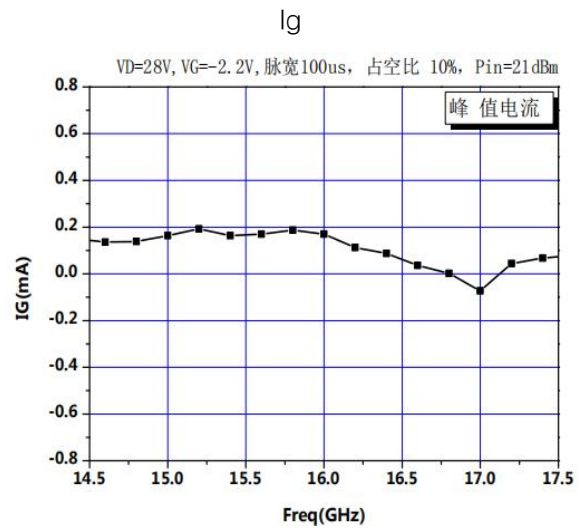
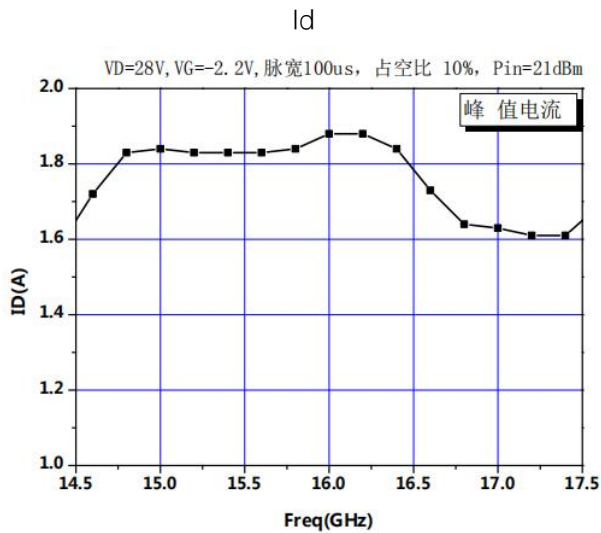
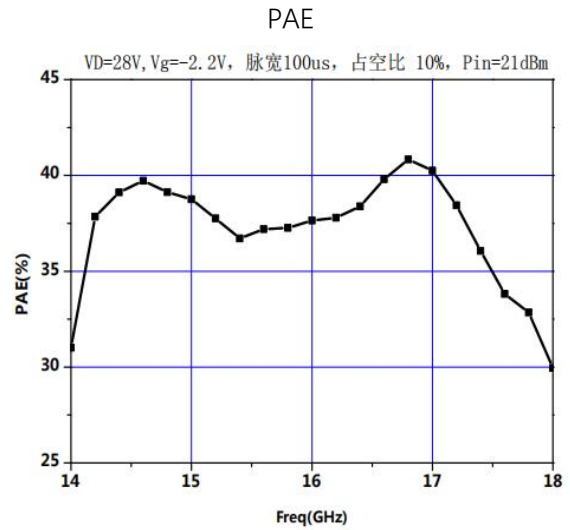
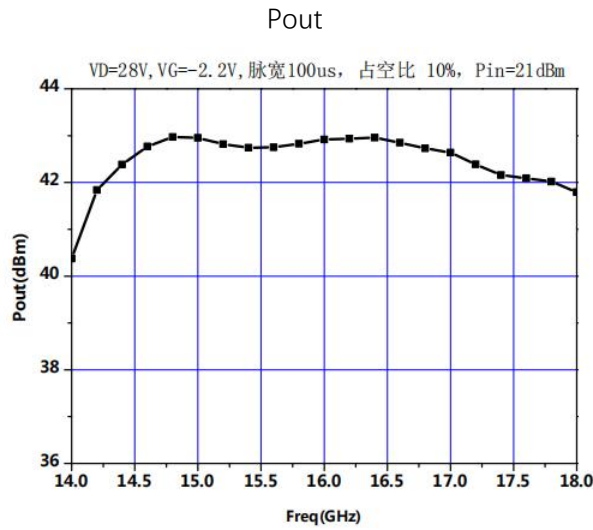
Test Curves

VSWRin



Gain

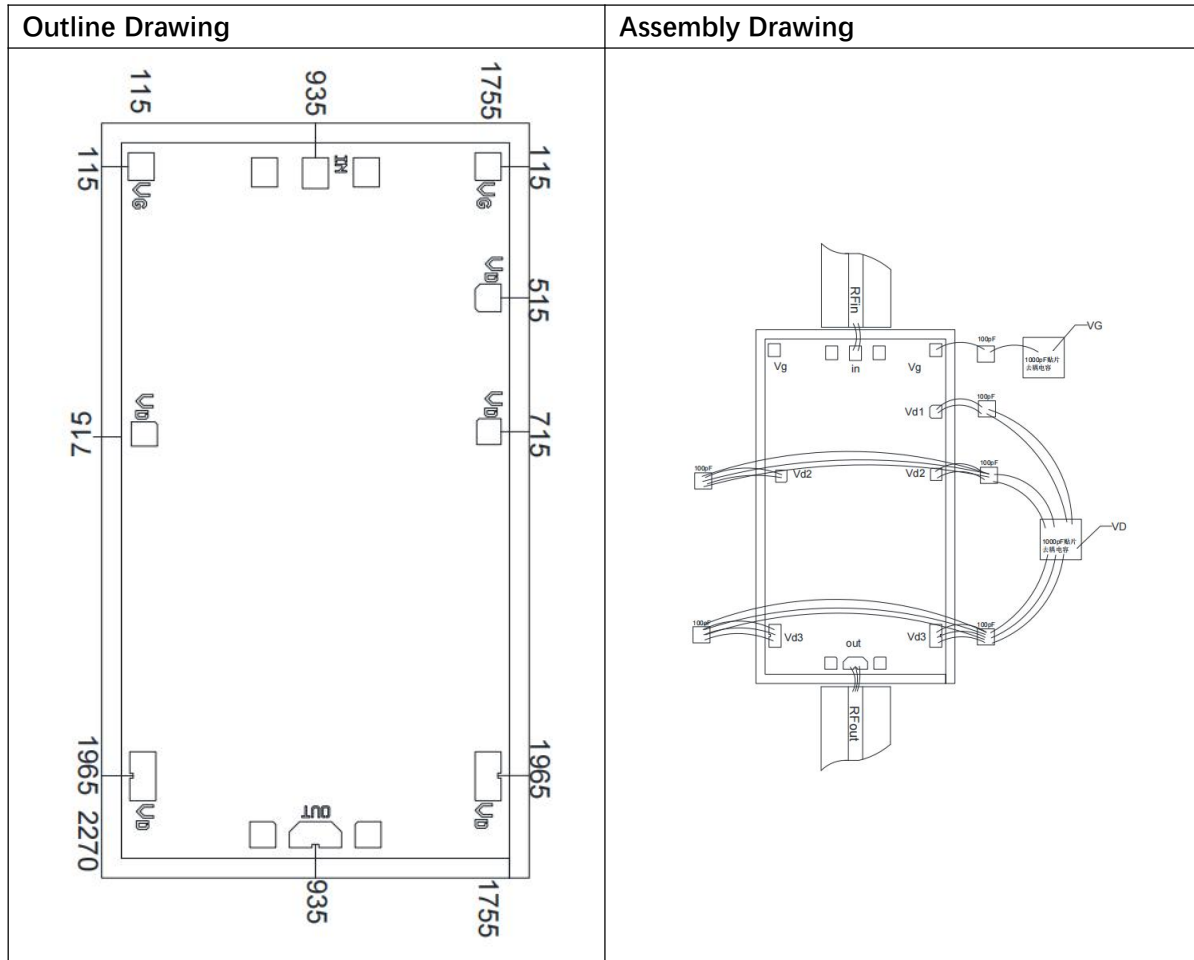




Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	32V	
Id	Drain Current	2.5A	Peak Current
Vg	Gage Voltage	-1.0V	
Ig	Gate Current	10mA	
Pd	DC Power	50W	Peak Power
Pin	Input Power	22dBm	
Tch	Channel Temperature	225°C	
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~150°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