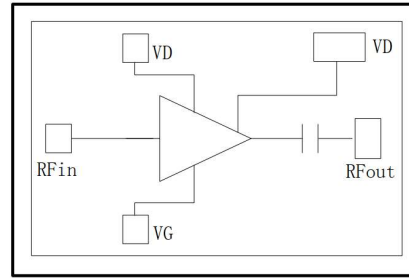


Performance

- Frequency: 0.5~4.2GHz
- Typical Signal Gain: 27.5dB
- Typical Pout: 33dBm
Typical Id: 0.4A
- Bias: 28V
- Technology: 0.25um HEMT
- Size: 2mm*2.35mm*0.08mm

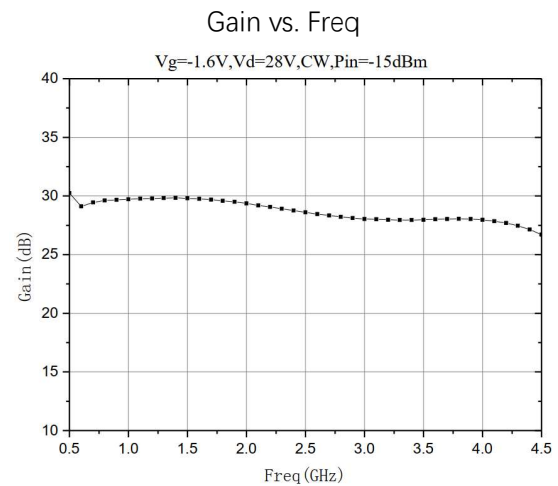
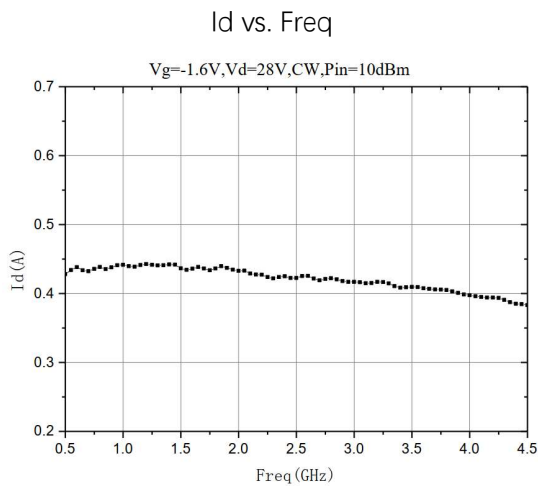
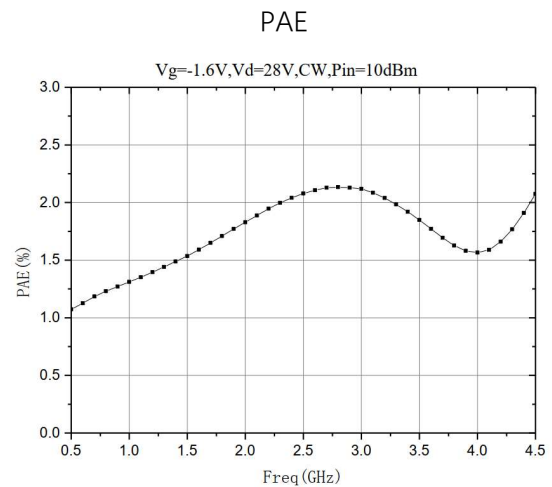
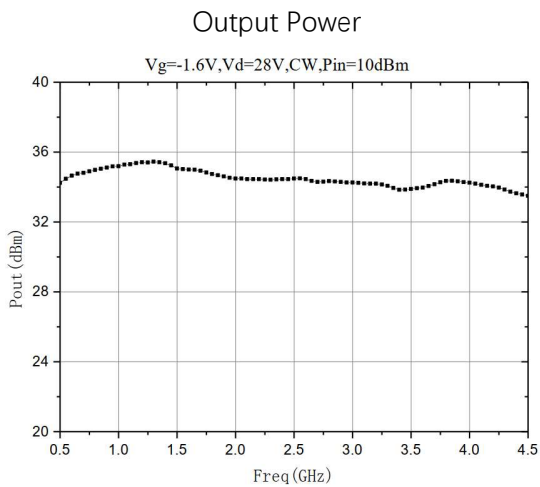
Function Diagram



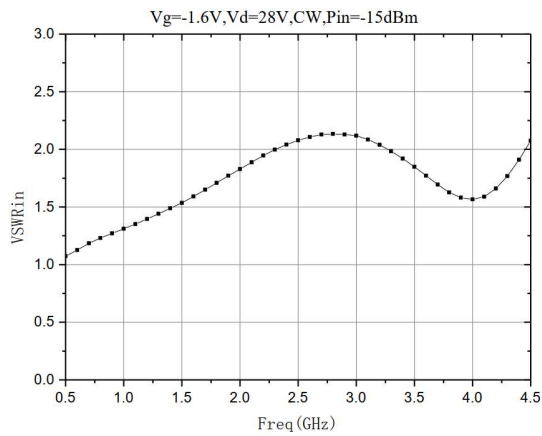
Electrical Specifications (TA=25°C, Vd=28V, F: 0.5~4.2GHz, Pin=10dBm)

Symbol	Parameter	Min	Typical	Max	Unit
G	Small Signal Gain	-	29	32	dB
Gp	Power Gain	-	23	-	dB
Pout	Saturated Power	-	33	-	dBm
Id	Dynamic Current	-	0.4	0.5	A

Test Curves (Vg= -1.6V, Vd=28V, Pin=10dBm, CW)



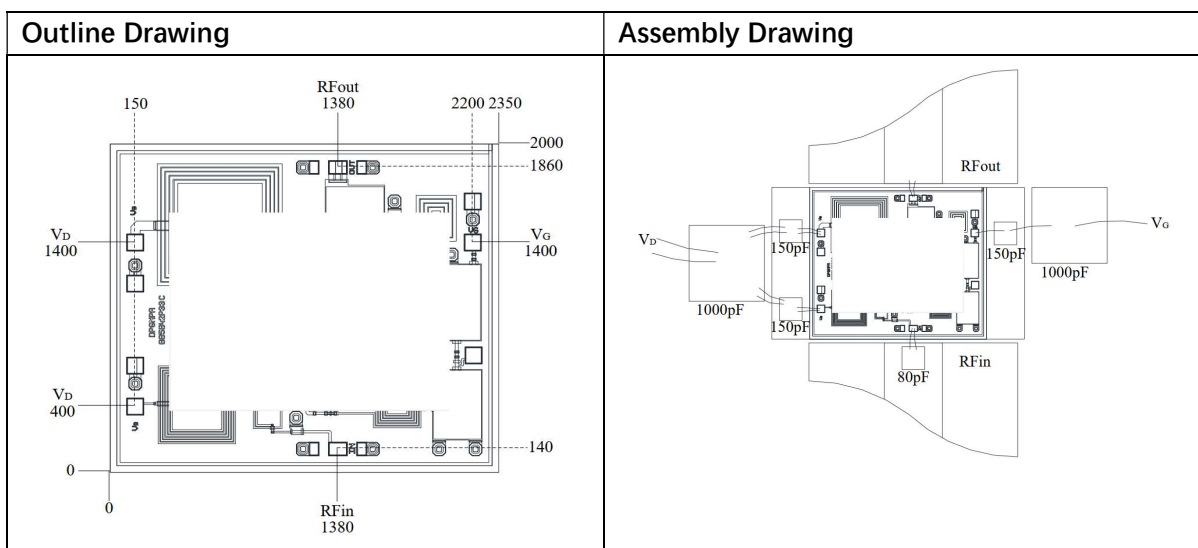
Input VSWR



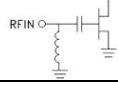

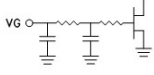

Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	32V	
I _d	Drain Current	1A	
P _d	DC Power	20W	
P _{in}	Input Power	18dBm	
T _{ch}	Channel Temperature	225°C	
T _m	Mounting Temperature	310°C	30 s, N ₂ Protection
T _{stg}	Storage Temperature	-65~150°C	

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



Pads Definition

Pad	Description	Equivalent Circuit
RFin	RF Signal input, connect to 50ohm system, 80pF block capacitor is needed	
RFout	RF Signal output, connect to 50ohm system, no need block capacitor	
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	