

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 0.1~0.4GHz
- Typical Pout : $\geq 47\text{dBm(CW)}$
- Typical Gain: $\geq 15\text{dB}$
- Typical PAE: $\geq 75\%$
- Bias: 28V/-2.7~-2.0V@0.5A
- Package: Carrier, non packaged

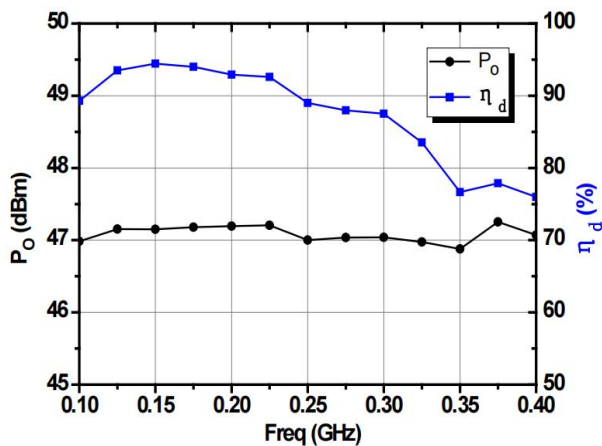


Electrical Specifications (TA=25°C, Vd=28V, Idq=0.5A, F:0.1~0.4GHz, Pin=32dBm)

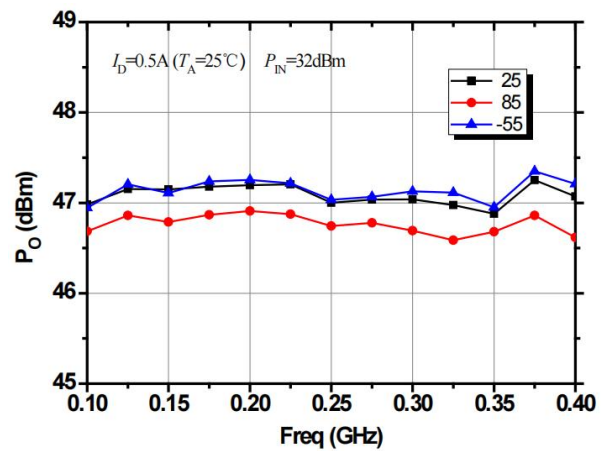
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	47	-	-	dBm
Gp	Power Gain	15	-	-	dB
η_{add}	Power Added Efficiency	75	-	-	%
ΔG_p	Gain Flatness	-	-	± 0.3	dB
Rth	Thermal Resistance	-	2.5	-	°C/W

Test Curves

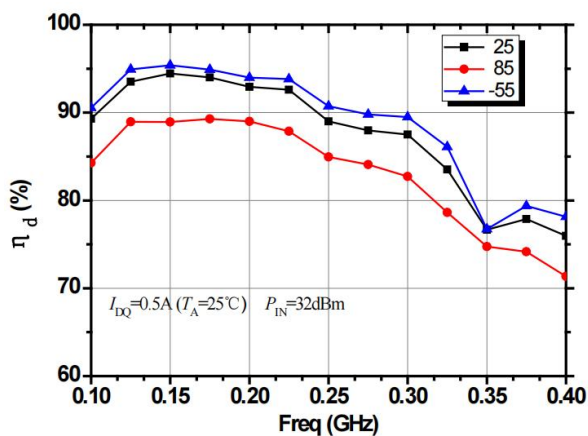
Pout, η_{add} &Freq.



Pout&Freq. @ Different Temp.



η_{add} &Freq. @ Different Temp.

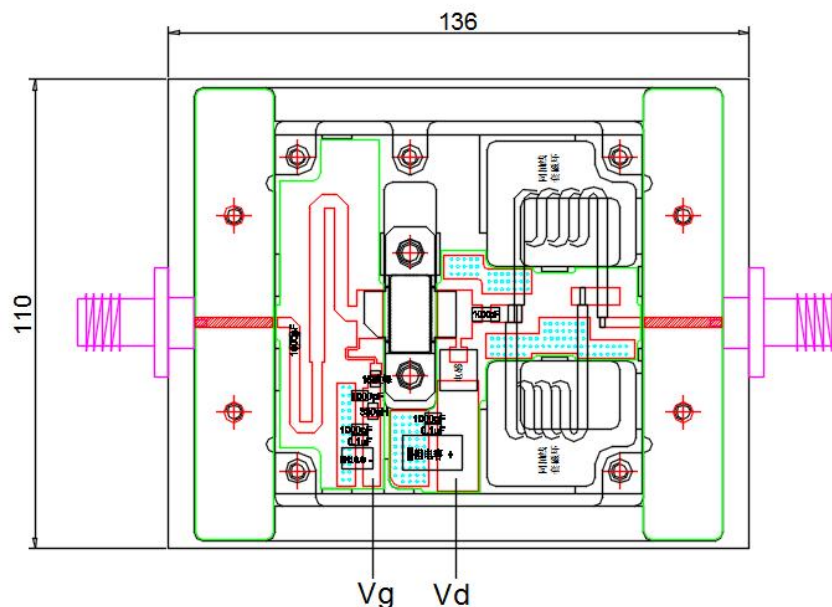


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	50W	25℃
Tch	Channel Temperature	225℃	【1】
Tm	Mounting Temperature	300℃	1 min, N2 Protection
Tstg	Storage Temperature	-55~175℃	

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

Outline Drawing & Application Circuit



Note:

- (1) The input standing wave of this product is relatively high, and radio frequency isolation measures are required;
- (2) The RF input and output impedance values of this product are both 50 ohms;
- (3) Please strictly follow the order of adding negative electricity first and then positive electricity in the power-on sequence of this product. When de-energizing, first reduce the drain voltage and then reduce the gate voltage;
- (4) Pay attention to heat dissipation during the use of this product. The higher the shell temperature, the shorter the service life, and the operating temperature should not be higher than 85 degrees;
- (5) This product is an electrostatic sensitive device. It is necessary to pay attention to electrostatic protection during storage and use, and it needs to be well grounded when using it.