Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 0.5~2.5GHz
- Typical Pout : PL(100us,10%)53dBm,CW≧51dBm
- Typical Gain: PL 13dB,CW 11dB
- Typical PAE: ≧50%
- Bias: PL 48V,CW 36V,Idq=1A
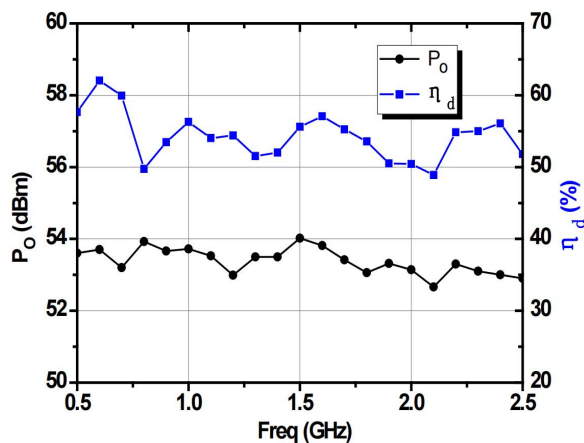- Package: Carrier, non packaged

Electrical Specifications

Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	51(CW) 52.8(PL)	-	-	dBm
Gp	Power Gain	11(CW)	13(PL)	-	dB
ηadd	Power Added Efficiency	50	-	-	%
△Gp	Gain Flatness	-	-	±1.0	dB
Rth	Thermal Resistance	-	0.8	-	℃/W

【2】 PL (TA=25℃,Vd=48V,Idq=1A,Pin=40dBm,PL=100us,D.C=10%)

CW（TA=25℃,Vd=36V,Idq=1A,F: 0.5~2.5GHz,Pin=40dBm）

Test Curves

Pout、ηadd&Freq. （PL）

Pout、ηadd&Freq. （CW）
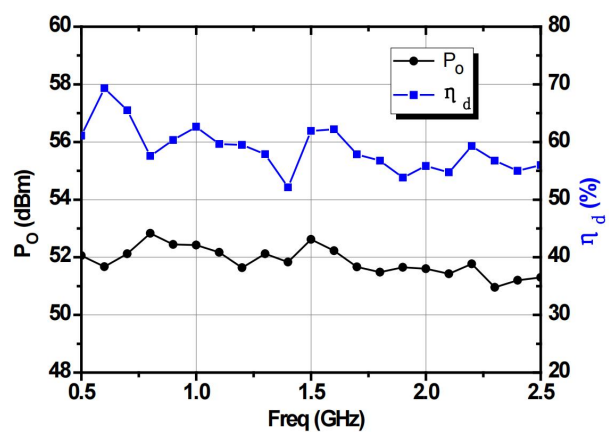
Absolute Max Ratings (T$_A$=25℃)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	80V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	250W	25℃
Tch	Channel Temperature	225℃	【1】
Tm	Mounting Temperature	300℃	1 min, N$_2$ Protection
Tstg	Storage Temperature	-55~175℃	

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

Outline Drawing & Application Circuit
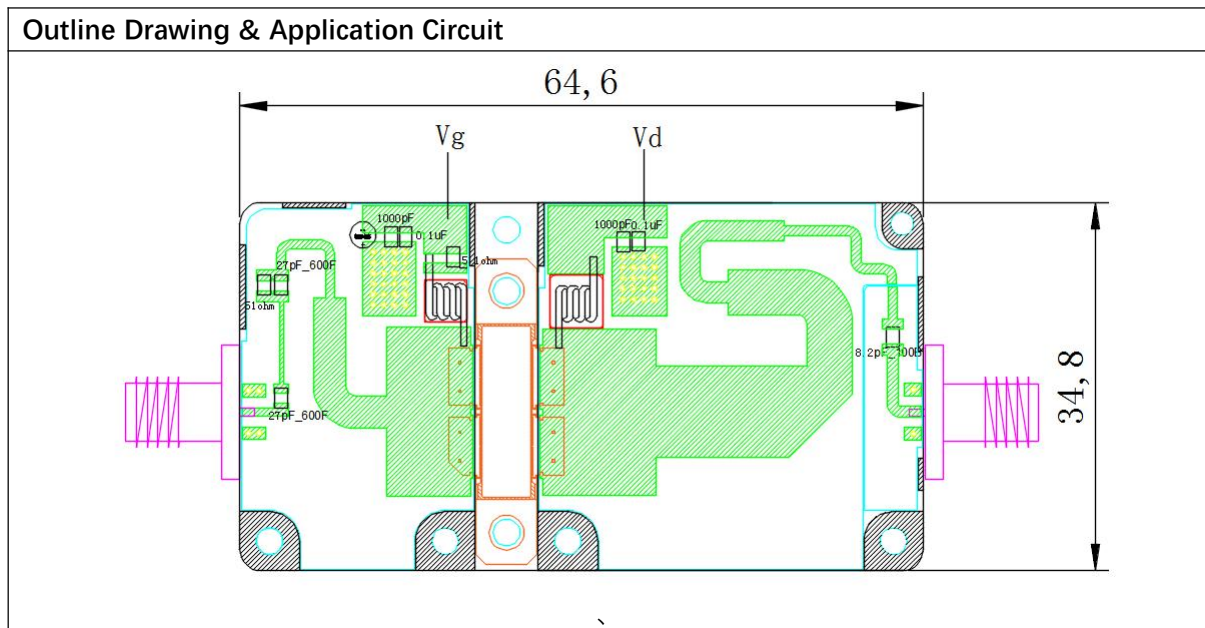
Note:

(1) The input and output impedance values of this power amplifier module are both 50 ohms;

(2) Please strictly follow the order of adding negative electricity first and then positive electricity in the power-on sequence. When de-energizing, first reduce the drain voltage and then reduce the gate voltage;

(3) This product is a high-power device. It is necessary to pay attention to heat dissipation during use. The higher the case temperature, the shorter the service life. It is advisable to use the temperature not higher than 85 degrees;

(4) 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.

(5) In order to ensure the good performance of the power module, the power filter and energy storage capacitor should be reasonably selected according to the modulation mode during pulse operation;

(6) The input standing wave is relatively high, and the input terminal needs to be isolated.