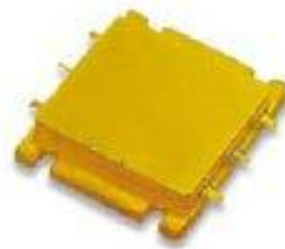


Performance

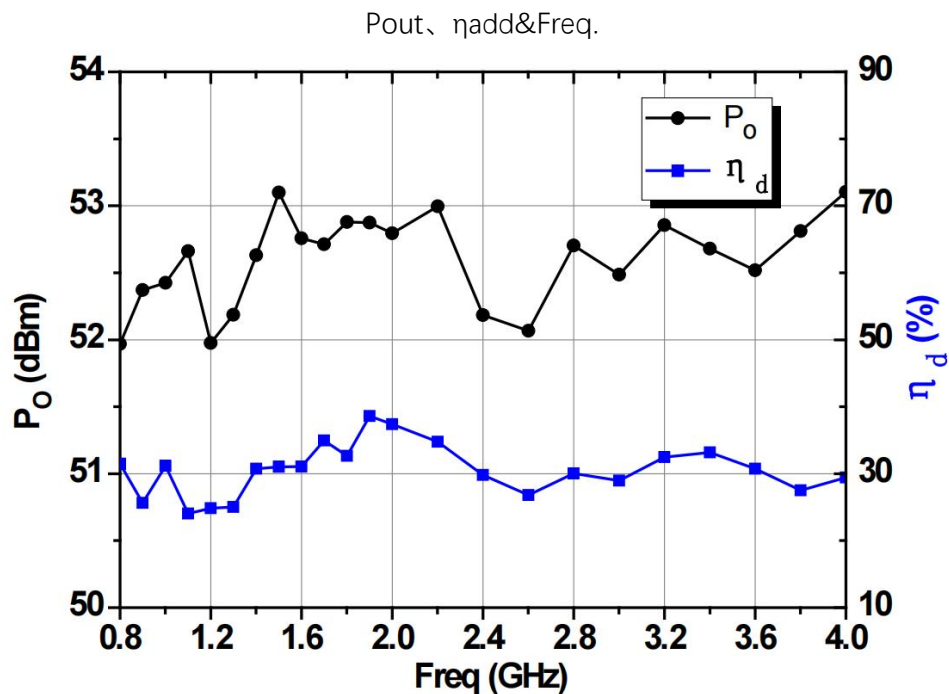
- Technology: 0.25um Power GaN HEMT
- Frequency: 0.8~4.2GHz
- Typical Pout : $\geq 52\text{dBm}(100\mu\text{s}, 10\%)$
- Typical Gain: $\geq 9\text{dB}$
- Typical PAE: $\geq 30\%$
- Bias: 48V@1A(adjustable)
- Package: Metal Ceramic



Electrical Specifications (TA=25°C, Vd=48V, Idq=1A, F: 0.8~4.2GHz, Pin=43dBm, PL=100us, D.C=10%)

Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	52	-	-	dBm
Gp	Power Gain	9	-	-	dB
η_{add}	Power Added Efficiency	-	30	-	%
ΔG_p	Gain Flatness	-	-	± 0.6	dB
Rth	Thermal Resistance	-	0.95	-	°C/W

Test Curves

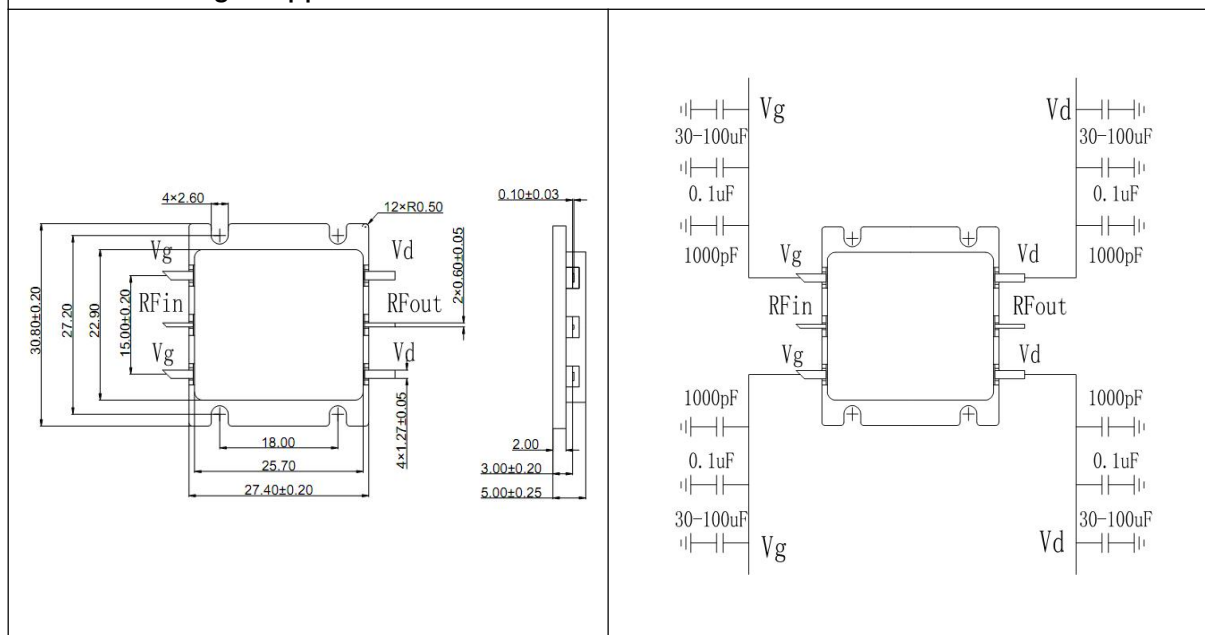


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	80V	
V _g	Grid Voltage	-5V	
P _d	DC Dissipation	250W	25°C
T _{ch}	Channel Temperature	225°C	【1】
T _m	Mounting Temperature	300°C	1 min, N ₂ Protection
T _{stg}	Storage Temperature	-55~175°C	

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

Outline Drawing & Application Circuit



Note:

- (1) This product is an internal matching tube, and the input and output impedance values 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) 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;
- (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;
- (6) The input standing wave is relatively high, and radio frequency isolation measures are required at the input end.