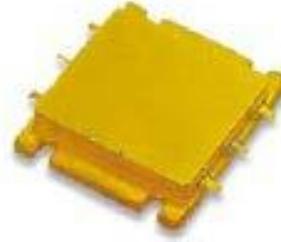


### Performance

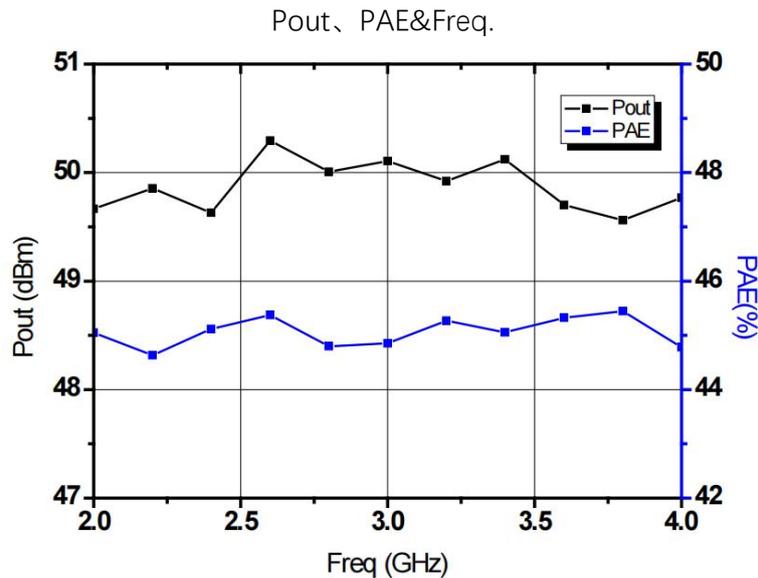
- Technology: 0.25um Power GaN HEMT
- Frequency: 2.0~4.0GHz
- Typical Pout : 50dBm(CW)
- Typical Gain: 10dB
- Typical PAE: 45%
- Bias: 28V/-2.0V
- Package: Metal Ceramic



### Electrical Specifications (TA=25°C, Vd=28V, F: 2.0~4.0GHz, Pin=41dBm)

Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	50	-	-	dBm
Gp	Power Gain	-	10	-	dB
$\eta_{add}$	Power Added Efficiency	-	45	-	%
$\Delta Gp$	Gain Flatness	-1.2	-	+1.2	dB

### Test Curves

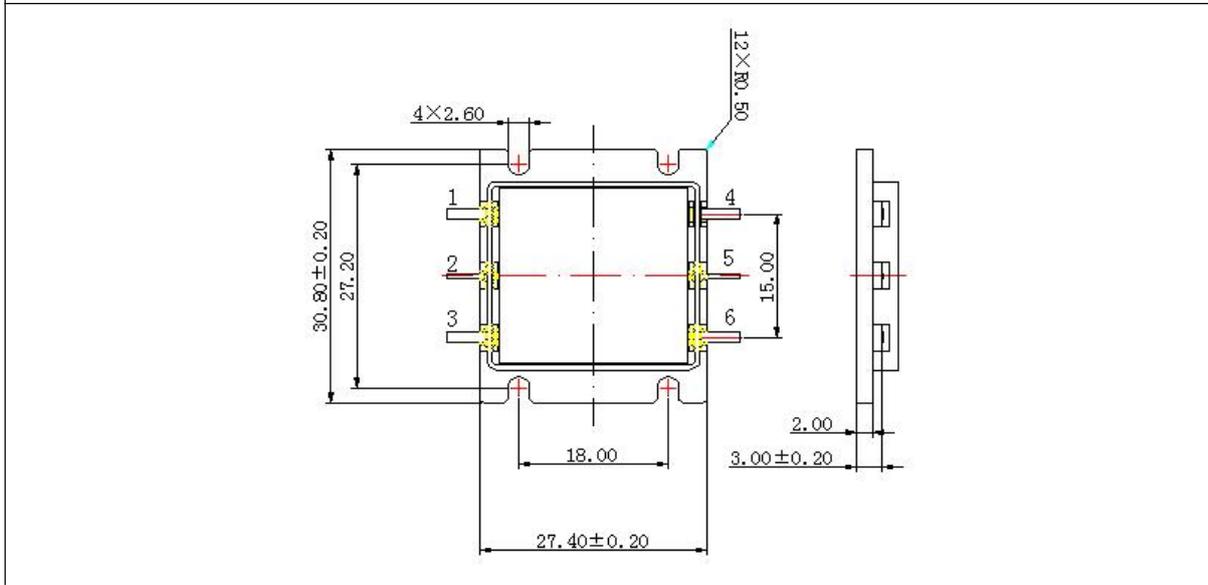


### Absolute Max Ratings (TA=25°C)

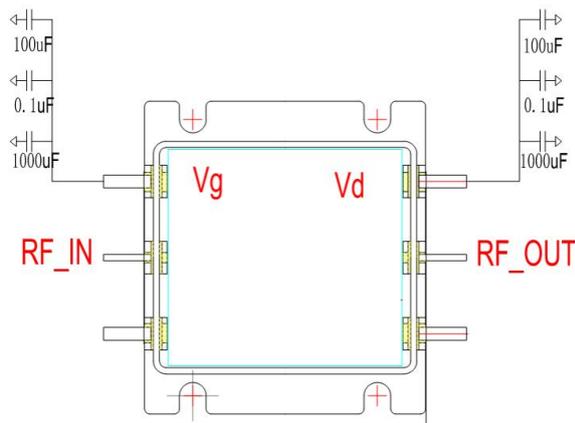
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	250W	25°C
Tch	Channel Temperature	225°C	<b>[1]</b>
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

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

### Outline Drawing



### Application Circuit



### Recommended Value

Parameter	Symbol	Value	Unit
Filter capacitor	C1,C2,C4, C5,C6	1000	pF
Filter capacitor	C3,C7	100	pF
DC isolation capacitance	C8,C9	20	pF
Stabilizing resistance	R1	15	Ω
Resistance	R2	50	Ω
Microstrip line	TL1,TL2	λ/4	-

### Note:

- (1) This product is an internal matching tube, with input and output impedance values of 50 ohms;
- (2) Please strictly follow the sequence of applying negative power first and then positive power. When removing power, first decrease the leakage voltage and then decrease the gate voltage;
- (3) This product is a high-power device, and attention should be paid to heat dissipation during use. The higher the shell temperature, the shorter the service life. The use temperature should not be higher than 80 degrees Celsius;
- (4) This product is an electrostatic sensitive device, which requires attention to electrostatic protection during storage and use, and requires good grounding during use;
- (5) The input standing wave ratio is high, and an isolator needs to be connected to the input terminal.