

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 4.4~5.0GHz
- Typical Pout : 54dBm
- Typical Gain: 10dB
- Typical PAE: 55%
- Bias: 32V/-2.8V
- Package: Metal Ceramic

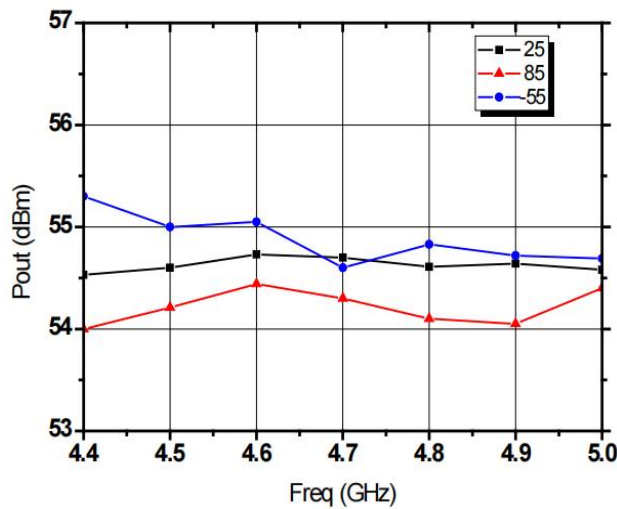


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=32\text{V}$, $V_g=-2.8\text{V}$, $I_d\approx 12.8\text{A}$, $F: 4.4\sim 5.0\text{GHz}$, $PL=1\text{ms}$, $D.C=15\%$)

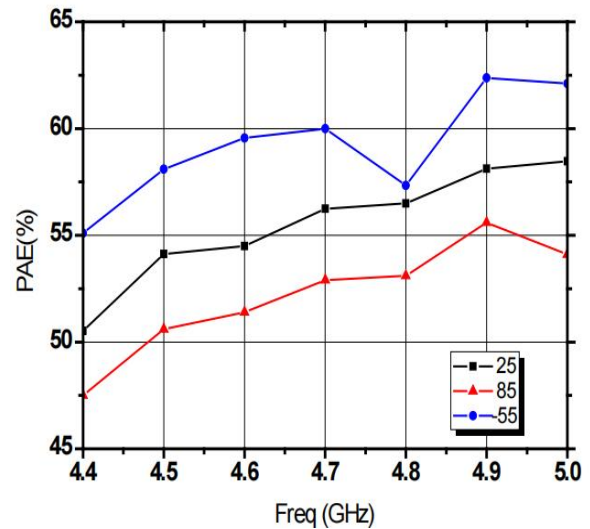
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	54	-	dBm
Gp	Power Gain	-	10	-	dB
η_{add}	Power Added Efficiency	-	50	-	%
ΔGp	Gain Flatness	-0.8	-	+0.8	dB

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

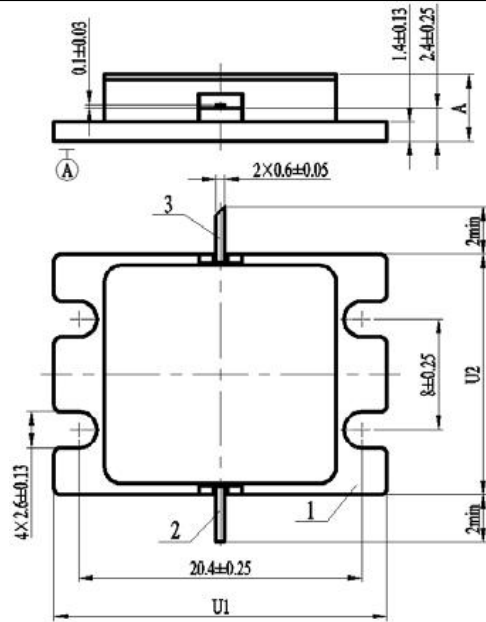


Absolute Max Ratings ($T_A=25^{\circ}\text{C}$)

Symbol	Parameter	Value	Remark
V_d	Drain Voltage	40V	
V_g	Grid Voltage	-5V	
P_d	DC Dissipation	500W	25°C
T_{ch}	Channel Temperature	175°C	[1]
T_m	Mounting Temperature	300°C	1 min, N2 Protection
T_{stg}	Storage Temperature	-55~175°C	

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

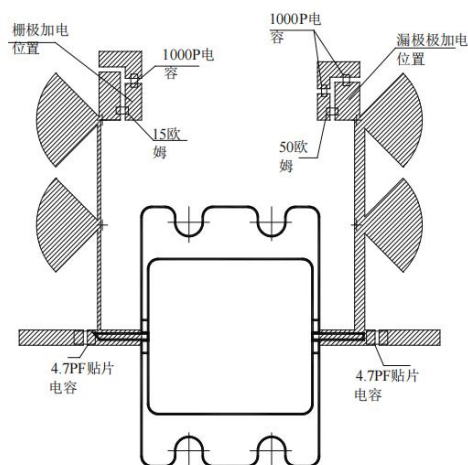
Outline Drawing



Dimension Symbols

Symbol	Value (unit: mm)	
	Min.	Max.
U1	23.80	24.20
U2	17.20	17.60
A	-	5.2

Application Circuit



Note:

- (1) This product is an internal matching tube, with input and output impedance values of 50 ohms;
- (2) The power-on sequence shall be in strict accordance with the sequence of applying negative power first and then positive power. When power-off, the leakage voltage shall be reduced first and then the grid voltage shall be reduced;
- (3) This product is a high-power device. Pay attention to heat dissipation during use. The higher the shell temperature is, the shorter the service life is. The service temperature should not be higher than 80 °C;
- (4) This product is an electrostatic sensitive device. It needs to pay attention to electrostatic protection during storage and use, and it needs to be grounded well during use.