

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 7.0~7.5GHz
- Typical Pout : 52dBm
- Typical Gain: 9dB
- Typical PAE: 45%
- Bias: 36V/-2.4V@8A
- Package: Metal Ceramic

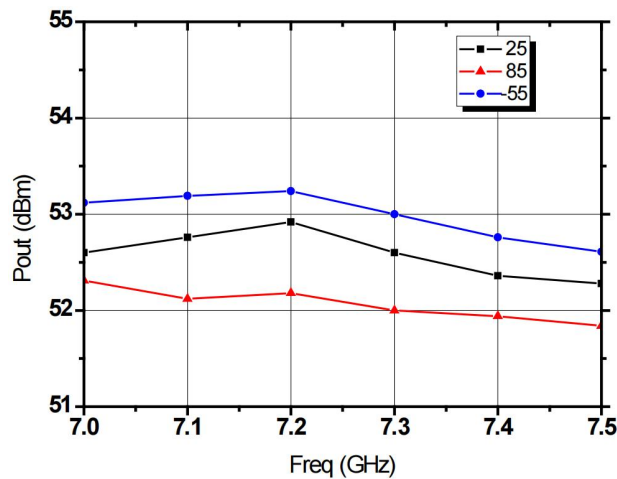


Electrical Specifications (TA=25°C, Vd=36V, Vg=-2.4V, Id≈8A, F: 7.0~7.5GHz)

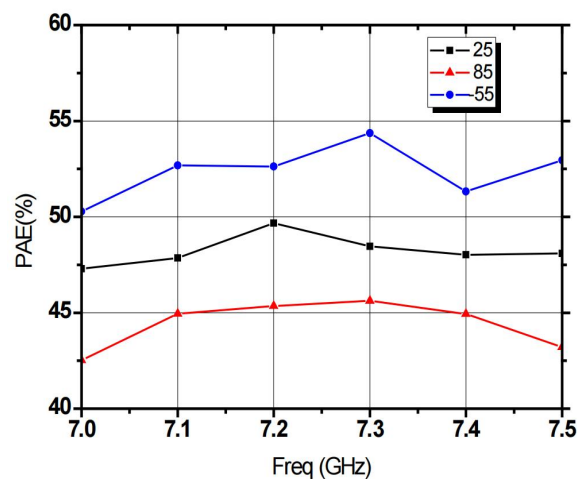
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	52	-	dBm
Gp	Power Gain	-	9	-	dB
η_{add}	Power Added Efficiency	-	45	-	%
ΔGp	Gain Flatness	-0.8	-	+0.8	dB

Test Curves

Pout&Freq. @ Different Temp.



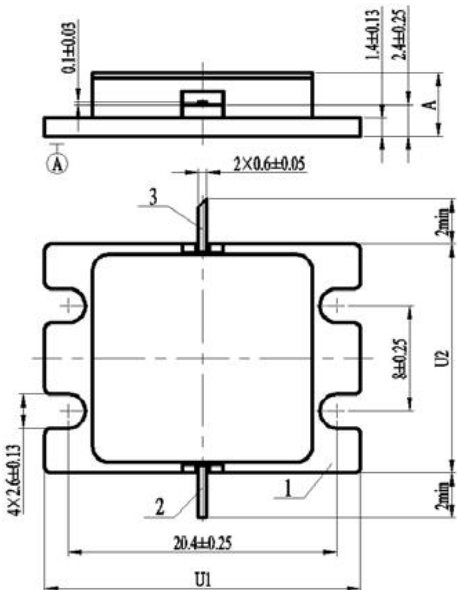
PAE&Freq. @ Different Temp.

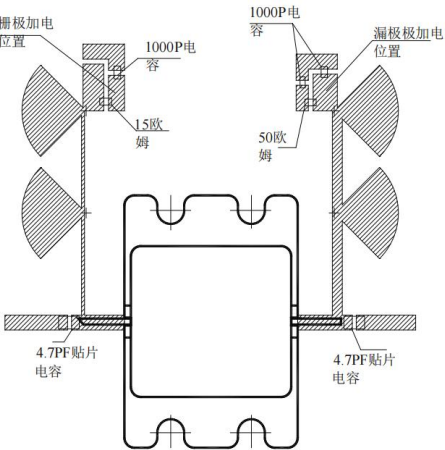


Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	60V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	100W	25°C
Tch	Channel Temperature	225°C	[1]
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	Dimension Symbols														
 The drawing shows a top view and a side view of the transistor. The top view is a square with rounded corners, with dimensions U1 (width) and U2 (height). The side view shows the thickness of the device, with dimensions A (total thickness) and 0.1±0.03 (top layer thickness). Other dimensions include 2×0.6±0.05, 1.4±0.13, 2.4±0.25, 8±0.25, 20.4±0.25, 4×2.6±0.13, 2min, and 3.	<table><tr><th rowspan="2">Symbol</th><th colspan="2">Value (unit: mm)</th></tr><tr><th>Min.</th><th>Max.</th></tr><tr><td>U1</td><td>23.80</td><td>24.20</td></tr><tr><td>U2</td><td>17.20</td><td>17.60</td></tr><tr><td>A</td><td>-</td><td>5.2</td></tr></table>	Symbol	Value (unit: mm)		Min.	Max.	U1	23.80	24.20	U2	17.20	17.60	A	-	5.2
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U1	23.80	24.20													
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A	-	5.2													

Application Circuit
 The diagram shows the transistor with its gate and drain connections. The gate is connected to a 1000P capacitor and a 15Ω resistor. The drain is connected to a 1000P capacitor and a 50Ω resistor. The source is connected to a 4.7PF capacitor. The diagram also shows the gate and drain positions and the 4.7PF capacitor.

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 80 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.