

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 8.5~9.6GHz
- Typical Pout : 54dBm
- Typical Gain: 8dB
- Typical PAE: 40%
- Bias: 40V/-2.6V
- Package: Metal Ceramic

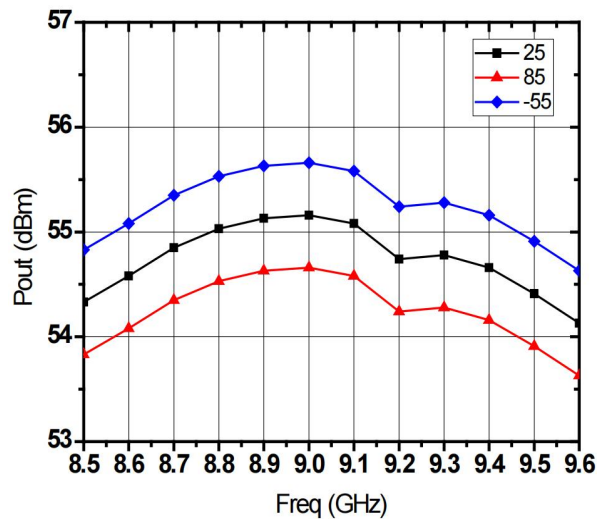


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=50\text{V}$, $V_g=-2.6\text{V}$, $F: 8.5\sim 9.6\text{GHz}$, $PL=100\mu\text{s}$, $D.C=10\%$)

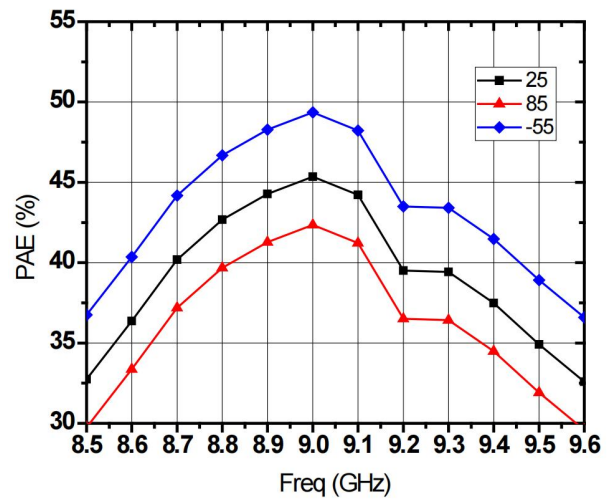
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	54	-	dBm
Gp	Power Gain	-	8	-	dB
η_{add}	Power Added Efficiency	-	40	-	%
Rth	Thermal Resistance	-	-	-	$^{\circ}\text{C}/\text{W}$
ΔG_p	Gain Flatness	-0.8	-	+0.8	dB

Test Curves

Pout&Freq. @ Different Temp.



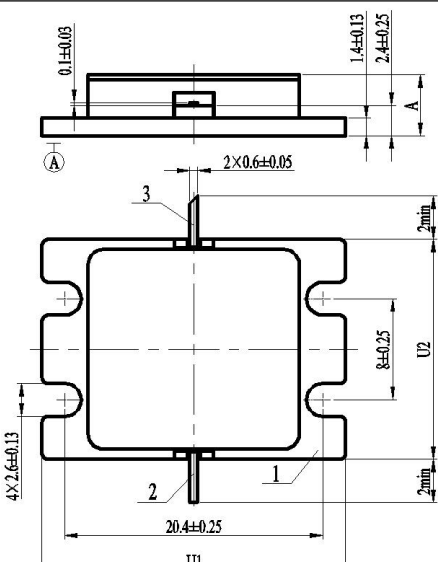
PAE&Freq. @ Different Temp.

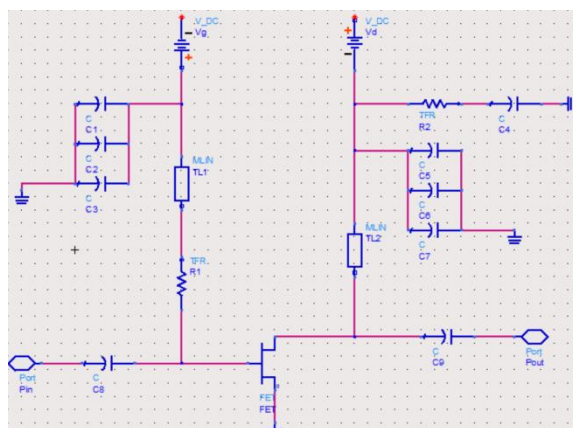


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	50V	
V _g	Grid Voltage	-5V	
P _d	DC Dissipation	450W	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	Dimension Symbol														
 The drawing consists of two views: a side view at the top and a top view at the bottom. The side view shows a base layer with a central raised area. Dimensions include a height of 0.1 ± 0.03 for the central part, a total height of 1.4 ± 0.13, and a base thickness of 2.4 ± 0.25. A dimension A indicates the height of the base layer. The top view shows a square central region with rounded corners. Dimensions include a central square side of $2 \times 0.6 \pm 0.05$, a distance of 3 from the center to the top edge of the central square, a distance of $2_{\min}$ from the center to the bottom edge of the central square, a distance of 8 ± 0.25 from the center to the side edge of the central square, a distance of $2_{\min}$ from the center to the side edge of the central square, a distance of $4 \times 2.6 \pm 0.13$ from the center to the outer edge of the central square, a distance of 20.4 ± 0.25 from the center to the outer edge of the central square, and a distance of U_1 from the center to the outer edge of the central square. The top view also shows a central square with a side of 20.4 ± 0.25 and a distance of U_2 from the center to the outer edge of the central square. The top view also shows a central square with a side of 20.4 ± 0.25 and a distance of U_2 from the center to the outer edge of the central square.	<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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Application Circuit	Pad Definition																												
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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.