

Performance

- Technology: 0.25um Power HEMT
- Frequency: 8.5~10GHz
- Typical Pout : 50dBm
- Typical Gain: 8dB
- Typical PAE: 40%
- Bias: 28V/-2.4V@6.5A
- Package: Metal Ceramic

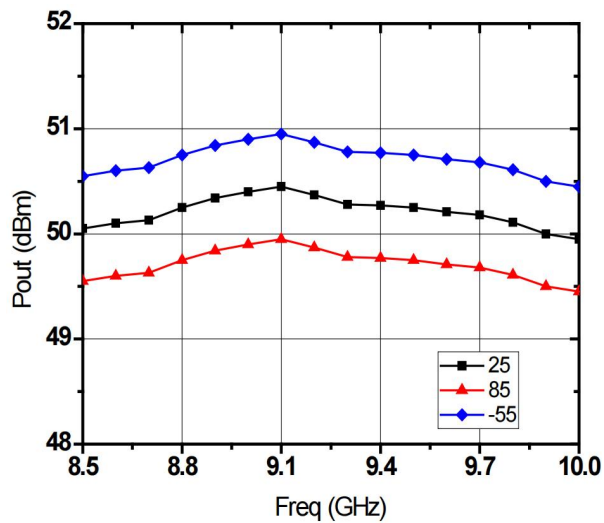


Electrical Specifications (TA=25°C, Vd=28V, Vg=-2.4V, F: 8.5~10GHz, Id≈6.5A)

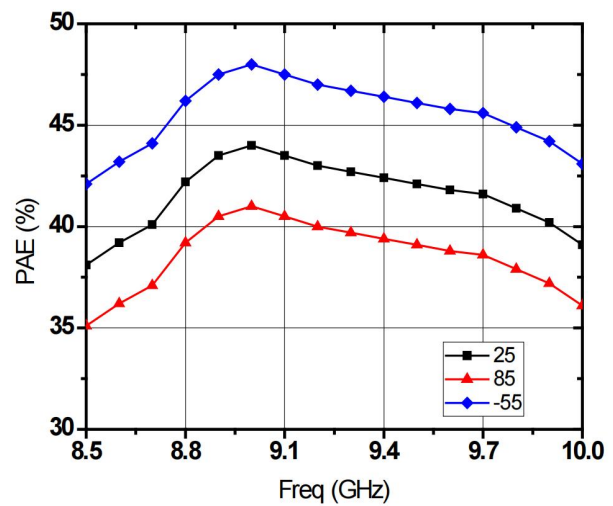
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	50	-	dBm
Gp	Power Gain	-	8	-	dB
η_{add}	Power Added Efficiency	-	40	-	%
Rth	Thermal Resistance	-	-	-	°C/W
ΔGp	Gain Flatness	-0.8	-	+0.8	dB

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

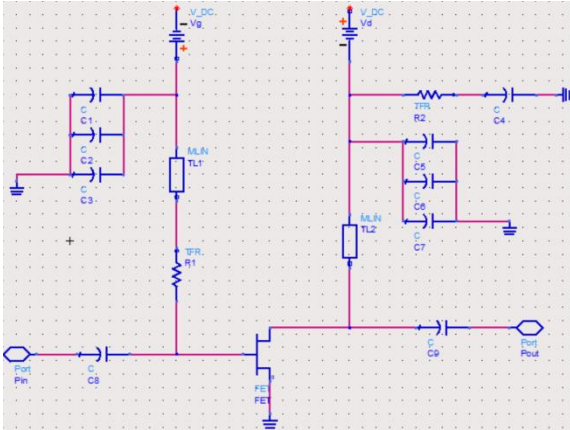


Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	250W	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 the physical dimensions of the GaN Transistor. The top view includes a central square pad with a width of 20.4 ± 0.25 mm, labeled U1. The distance from the center to the side pads is 8 ± 0.25 mm, labeled U2. The side pads have a width of $4 \times 2.6 \pm 0.13$ mm. The distance between the side pads is $2 \times 0.6 \pm 0.05$ mm. The distance from the center to the top pad is 1.4 ± 0.13 mm, and the distance from the center to the bottom pad is 2.4 ± 0.25 mm. The top pad has a width of 0.1 ± 0.05 mm. The bottom pad has a width of 2 min. The distance from the center to the side pads is 2 min. The distance from the center to the top pad is 2 min. The distance from the center to the bottom pad is 2 min.	<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.