

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 7.0~7.5GHz
- Typical Pout : 48dBm(CW)
- Typical Gain: 9dB
- Typical PAE: 45%
- Bias: 28V/-2.4V@4.5A
- Package: Metal Ceramic

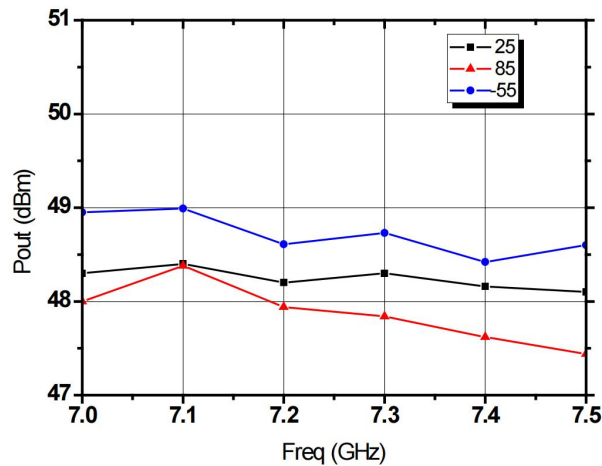


Electrical Specifications (TA=25°C, Vd=28V, Vg= -2.4V, Id≈4.5A, F: 7.0~7.5GHz)

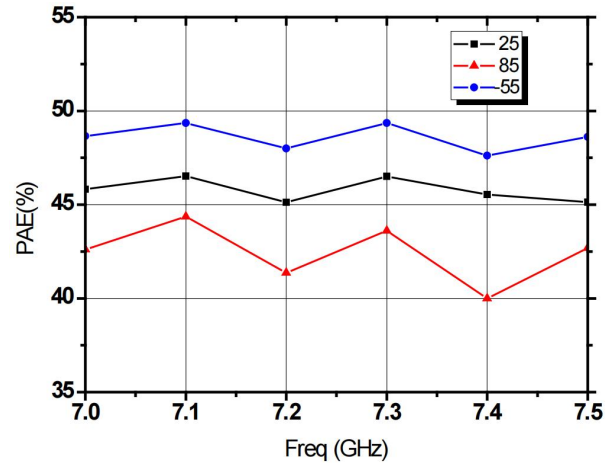
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	48	-	dBm
Gp	Power Gain	-	9	-	dB
η_{add}	Power Added Efficiency	-	45	-	%
ΔGp	Gain Flatness	-0.8	-	+0.8	dB

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.



Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	125W	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 consists of two views: a top view (bottom) and a side view (top). The top view shows a square-like footprint with rounded corners and four protruding leads labeled 1, 2, 3, and 4. Dimensions include: overall width U1, overall height U2, inner width 20.4±0.25, inner height 8±0.25, lead width 2x0.6±0.05, lead height 2min, and corner radius 4x2.6±0.13. The side view shows the profile of the device with dimensions: total height A, mounting pad height 1.4±0.13, and solder thickness 0.1±0.03.	<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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	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, 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.