

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 13.7~14.5GHz
- Typical Pout : 48dBm(CW)
- Typical Gain: 6dB
- Typical PAE: 30%
- Bias: 24V/1.5A/-2~-3V
- Package: Metal Ceramic

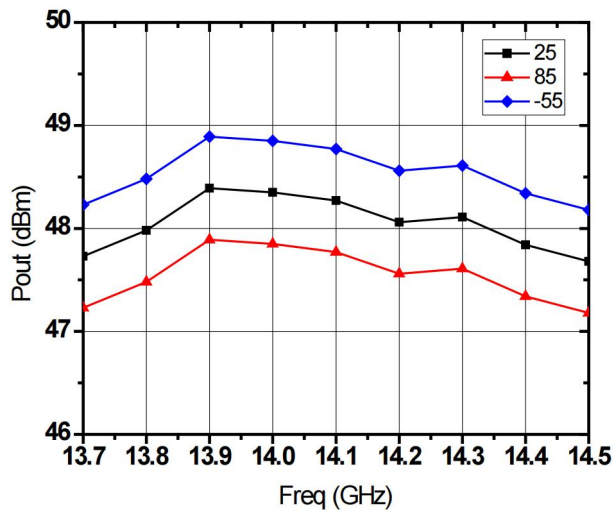


Electrical Specifications (TA=25°C,Vd=24V,Id≈1.5A,F: 13.7~14.5GHz)

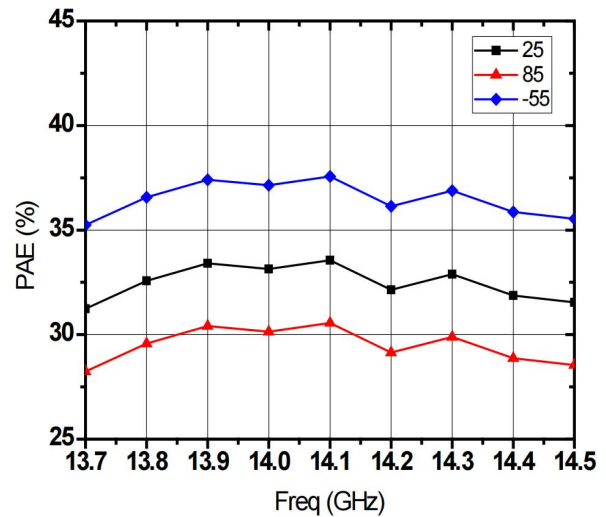
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	47	48	-	dBm
Gp	Power Gain	-	56	-	dB
η_{add}	Power Added Efficiency	-	30	-	%
Rth	Thermal Resistance	-	1.0	1.2	°C/W

Test Curves

Pout&Freq. @ Different Temp.



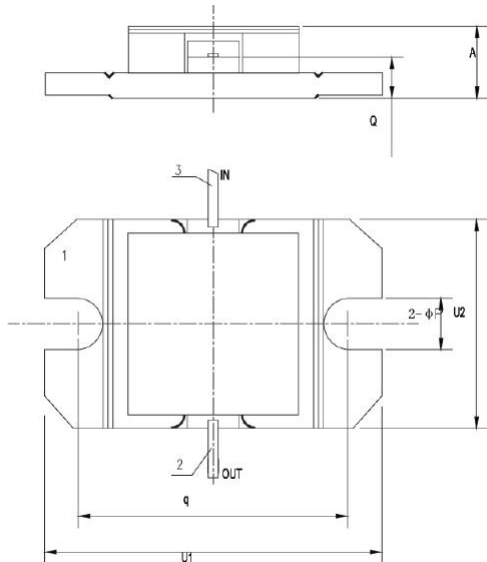
PAE&Freq. @ Different Temp.



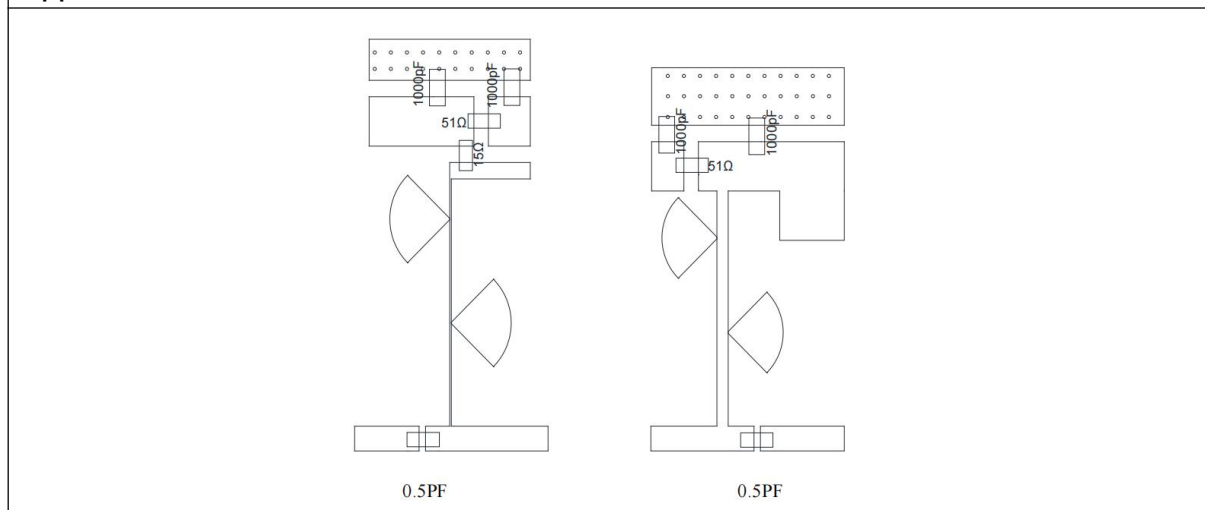
Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	40V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	150W	25°C
Tch	Channel Temperature	225°C	【1】
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~150°C	

【1】 Exceeding any one or combination of these limits may cause permanent damage.

Outline Drawing	Dimension Symbol																							
 1 — 源电极 2 — 漏电极 3 — 栅电极	<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>A</td><td>-</td><td>5.2</td></tr><tr><td>Q</td><td>2.50</td><td>2.80</td></tr><tr><td>q</td><td>16.80</td><td>17.20</td></tr><tr><td>U1</td><td>20.80</td><td>21.30</td></tr><tr><td>U2</td><td>12.85</td><td>13.10</td></tr><tr><td>ΦP</td><td>3.10</td><td>3.40</td></tr></table>	Symbol	Value (unit: mm)		Min.	Max.	A	-	5.2	Q	2.50	2.80	q	16.80	17.20	U1	20.80	21.30	U2	12.85	13.10	ΦP	3.10	3.40
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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.