

Performance

- Technology: 0.5um Power HEMT
- Frequency: 1.2~1.6GHz
- Typical Pout : 150W
- Typical Gain: 13dB
- Typical PAE: 60%
- Bias: 28V/-2.5V
- Package: Metal Ceramic

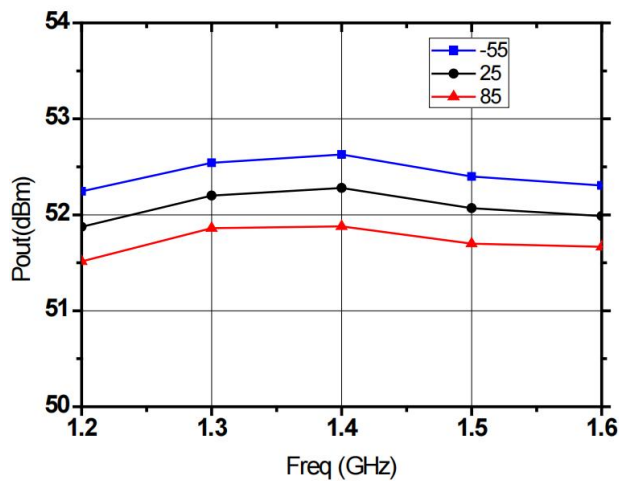


Electrical Specifications (TA=25°C, Vd=28V, Vg=-2.5V, F: 1.2~1.6GHz)

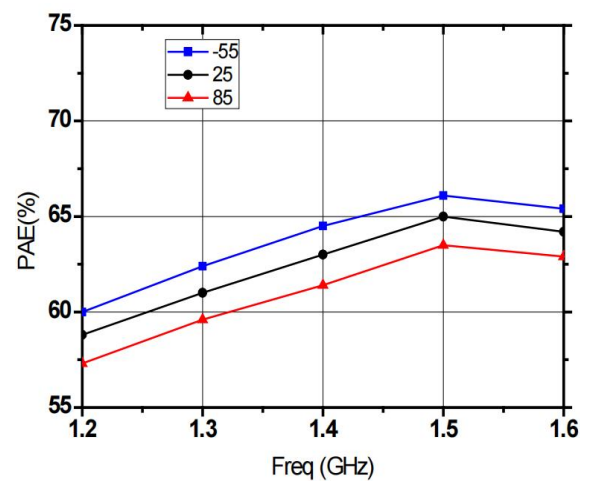
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	150	-	W
Gp	Power Gain	-	13	-	dB
η_{add}	Power Added Efficiency	-	60	-	%
ΔGp	Gain Flatness	-0.5		+0.5	dB
Rth	Thermal Resistance	-	-	0.8	°C/W

Test Curves

Pout&Freq. @ Different Temp.



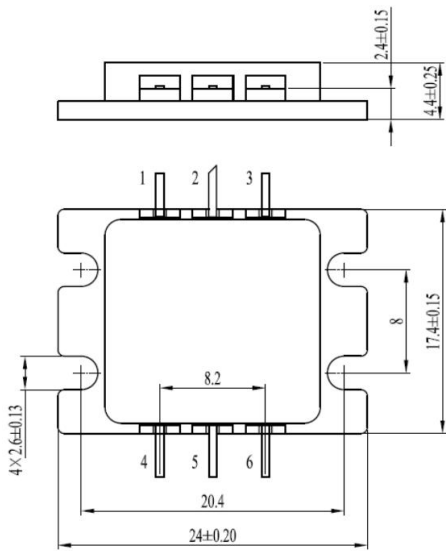
PAE&Freq. @ Different Temp.

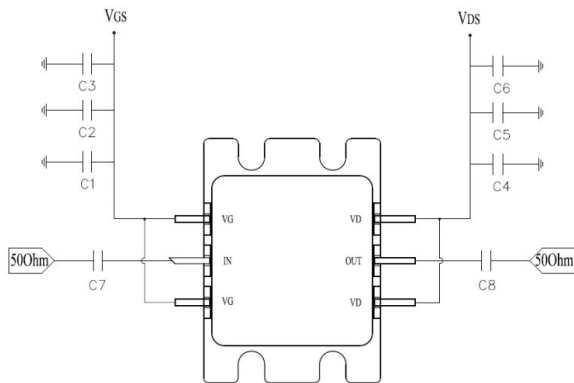


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	36V	
V _g	Grid Voltage	-5V	
P _d	DC Dissipation	125W	25°C
T _{ch}	Channel Temperature	175°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	Pad Definition												
 The drawing shows a top view and a side view of a GaN transistor. The top view is a square with rounded corners, with a central square area. Six pins are labeled: 1, 2, 3 on the top edge and 4, 5, 6 on the bottom edge. Dimensions are given in millimeters: overall width 24±0.20, overall height 17.4±0.15, central square width 8.2, central square height 8, distance from top edge to top of central square 2.4±0.15, distance from bottom edge to bottom of central square 4.4±0.25, and distance from side edge to side of central square 4×2.6±0.13. The side view shows the profile of the device with a total height of 4.4±0.25 and a top width of 2.4±0.15.	<table><tr><th>No</th><th>Function</th><th>No</th><th>Function</th></tr><tr><td>1、3</td><td>V_g</td><td>4、6</td><td>V_d</td></tr><tr><td>2</td><td>R_{Fin}</td><td>5</td><td>R_{Fout}</td></tr></table>	No	Function	No	Function	1、3	V _g	4、6	V _d	2	R _{Fin}	5	R _{Fout}
No	Function	No	Function										
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Application Circuit																			
	<table> <tr> <th>Parameter</th><th>Value</th></tr> <tr> <td>C1</td><td>100 pF</td></tr> <tr> <td>C2</td><td>1000 pF</td></tr> <tr> <td>C3</td><td>47 uF</td></tr> <tr> <td>C4</td><td>100 pF</td></tr> <tr> <td>C5</td><td>1000 pF</td></tr> <tr> <td>C6</td><td>10 uF</td></tr> <tr> <td>C7</td><td>20 pF</td></tr> <tr> <td>C8</td><td>20 pF</td></tr> </table>	Parameter	Value	C1	100 pF	C2	1000 pF	C3	47 uF	C4	100 pF	C5	1000 pF	C6	10 uF	C7	20 pF	C8	20 pF
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Note:

- (1) The typical packaging form is C164-2 shell packaging;
- (2) Connect the circuit according to the diagram, pay attention to anti-static, and ensure good grounding and heat dissipation when using power devices;
- (3) In order to ensure the good performance of the power module, the capacity value of power filter and energy storage capacitor shall be reasonably selected according to the modulation mode during pulse operation.