

Performance

- Technology: 0.25um Power GaN HEMT
- Frequency: 6.0~7.5GHz
- Typical Pout : 43dBm(CW)
- Typical Gain: 10dB
- Typical PAE: 36%
- Bias: 28V/-2.2V
- Package: Metal Ceramic

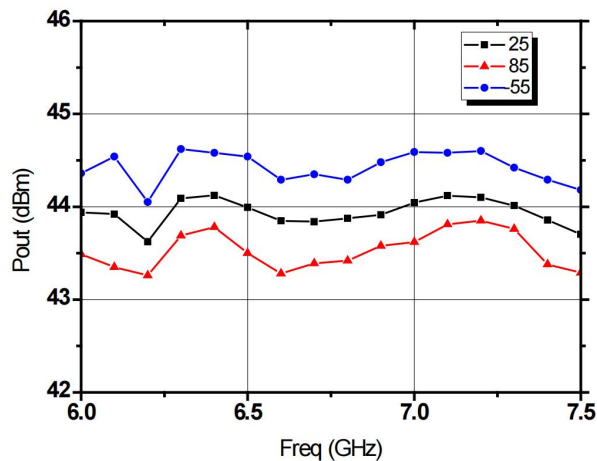


Electrical Specifications (TA=25°C, Vd=28V, Id≈2A, F: 6.0~7.5GHz)

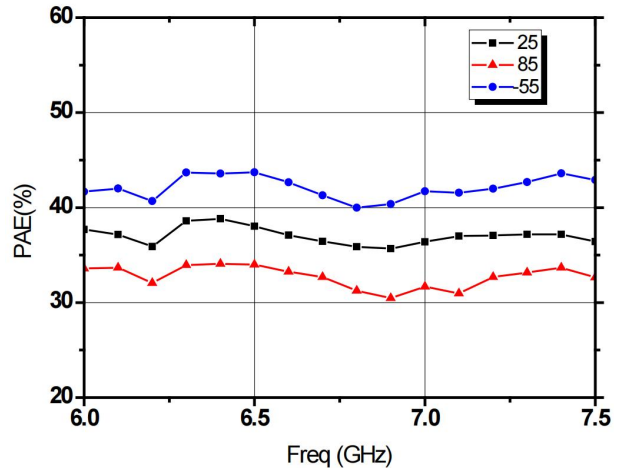
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	46	-	dBm
Gp	Power Gain	-	10	-	dB
η_{add}	Power Added Efficiency	-	36	-	%
ΔGp	Gain Flatness	-1.0	-	+1.0	dB

Test Curves

Pout&Freq. @ Different Temp.



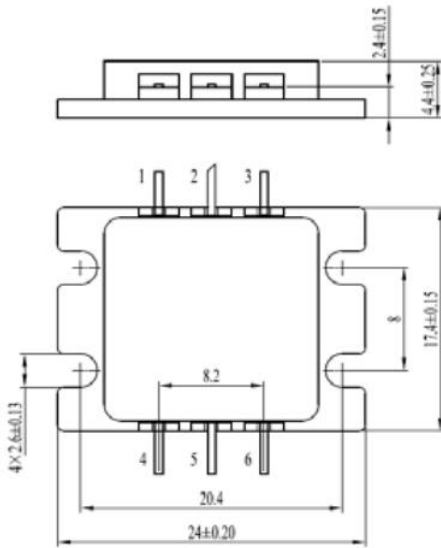
PAE&Freq. @ Different Temp.

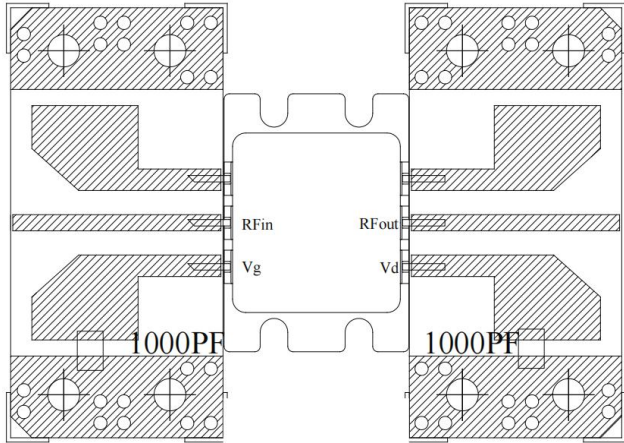


Absolute Max Ratings (TA=25°C)

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 transistor. The top view indicates a central square area with a width of 8.2 and a total width of 20.4. The overall width is 24±0.20 and the height is 17.4±0.15. Pin 1 and 3 are on the top, pin 2 is in the middle, and pins 4, 5, and 6 are on the bottom. The side view shows a height of 4.4±0.25 and a top flange 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>Vg</td><td>4、6</td><td>Vd</td></tr><tr><td>2</td><td>RFin</td><td>5</td><td>RFout</td></tr></table>	No	Function	No	Function	1、3	Vg	4、6	Vd	2	RFin	5	RFout
No	Function	No	Function										
1、3	Vg	4、6	Vd										
2	RFin	5	RFout										

Application Circuit
 The application circuit diagram shows the transistor connected to a matching network. The input is RFin, the output is RFout, the gate is Vg, and the drain is Vd. Two 1000PF capacitors are connected between the gate and drain to provide feedback.

Note:

- (1) The typical packaging form is C164-2 shell package;
- (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 power filter and energy storage should be reasonably selected according to the modulation mode during pulse operation Capacitance value;