

Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 1.2~1.4GHz
- Typical Pout : 250W
- Typical Gain: 13dB
- Typical PAE: 60%
- Bias: 32V/-2.5V
- Package: Metal Ceramic

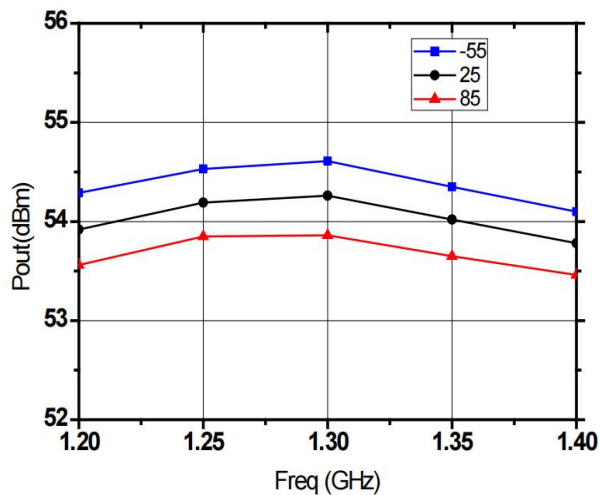


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=32\text{V}$, $V_g=-2.5\text{V}$, $F: 1.2\sim 1.4\text{GHz}$, $PL=1\text{ms}$, $D.C=10\%$)

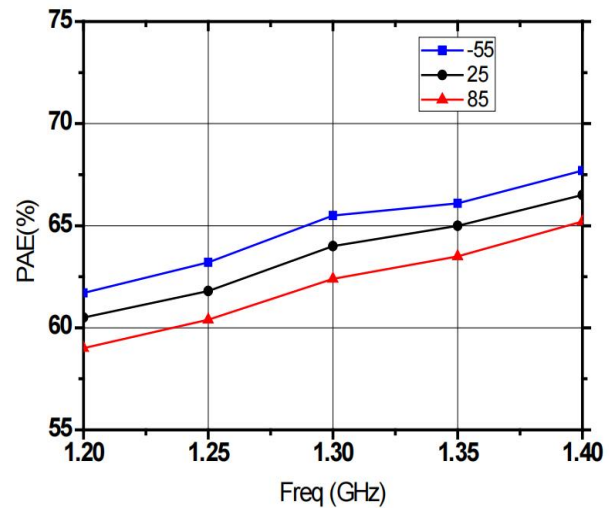
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	250	-	W
Gp	Power Gain	-	13	-	dB
η_{add}	Power Added Efficiency	-	60	-	%
ΔG_p	Gain Flatness	-0.5	-	+0.5	dB
Rth	Thermal Resistance	-	-	0.25	$^{\circ}\text{C}/\text{W}$

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	125W	25°C
Tch	Channel Temperature	175°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

		<table border="1"> <thead> <tr> <th>No</th><th>Function</th><th>No</th><th>Function</th></tr> </thead> <tbody> <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> </tbody> </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

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

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.