

Performance

- Technology: 0.5um Power HEMT
- Frequency: 0.41~0.48GHz
- Typical Pout: 63dBm
- Typical Gain: 18.5dB
- Typical PAE: 70%
- Bias: 60V/-3.1V
- Package: Metal Ceramic

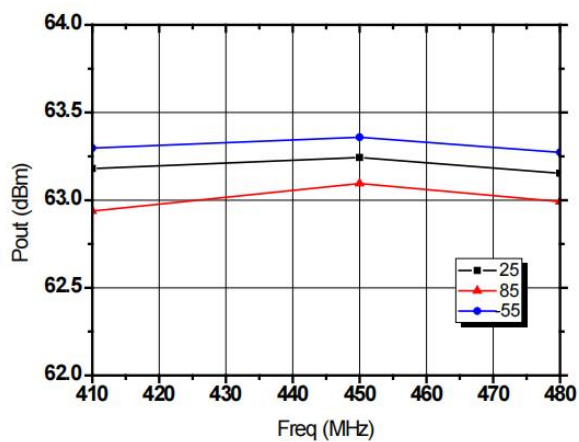


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=60\text{V}$ (PL=300us, D.C=10%), $V_g=-3.1\text{V}$, F: 0.41~0.48GHz)

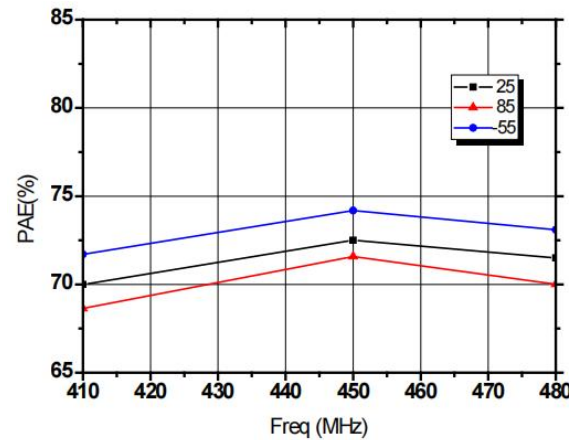
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	63	-	dBm
Gp	Power Gain	-	18.5	-	dB
η_{add}	Power Added Efficiency	-	70	-	%
ΔG_p	Gain Flatness	-0.5	-	+0.5	dB

Test Curves

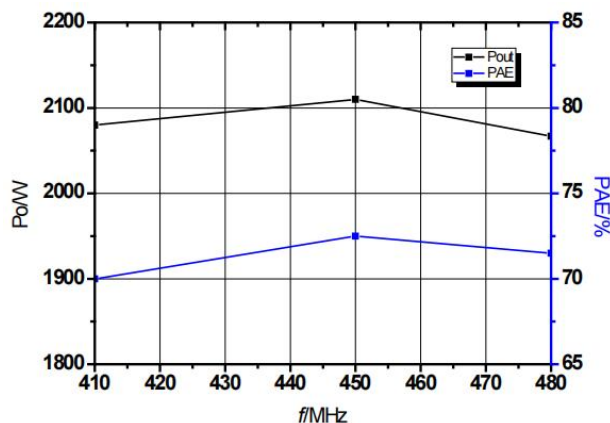
Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.



Pout, PAE&Freq.



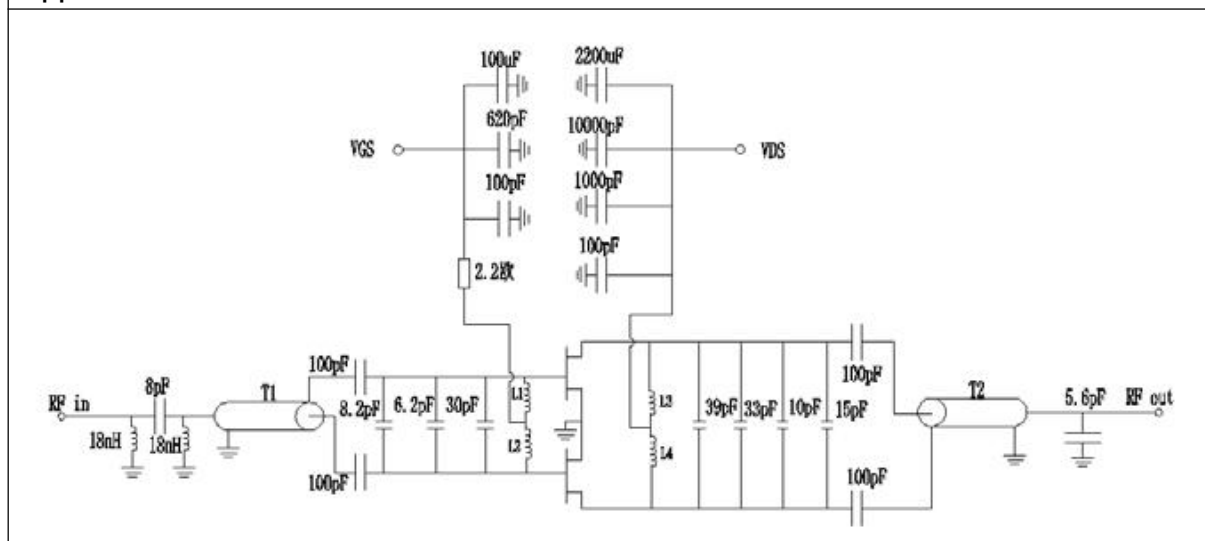
Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	62V	
V _g	Grid Voltage	-5V	
T _{ch}	Channel Temperature	225°C	【1】
T _A	Operating Temperature	-45~85°C	
T _{stg}	Storage Temperature	-65~125°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 (plan) and a side view (elevation). The top view shows a rectangular component with a central rectangular area and four smaller rectangular areas at the corners. Dimensions are labeled: A (width of the central area), b (width of the corner areas), C (width of the central area), F (width of the corner areas), H (width of the central area), H1 (width of the corner areas), P (width of the central area), Q (width of the corner areas), q (width of the central area), U1 (width of the corner areas), and U2 (width of the corner areas). The side view shows the component from the side, with dimensions labeled: U1 (total height), q (height of the central area), H1 (height of the corner areas), b (width of the corner areas), and U2 (width of the corner areas).	<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>4.70</td></tr><tr><td>b</td><td>11.56</td><td>11.87</td></tr><tr><td>C</td><td>0.05</td><td>0.15</td></tr><tr><td>F</td><td>2.07</td><td>2.33</td></tr><tr><td>H</td><td>17.17</td><td>-</td></tr><tr><td>H1</td><td>25.27</td><td>25.53</td></tr><tr><td>P</td><td>3.04</td><td>3.30</td></tr><tr><td>Q</td><td>2.77</td><td>3.02</td></tr><tr><td>q</td><td>35.43</td><td>35.69</td></tr><tr><td>U1</td><td>41.02</td><td>41.28</td></tr><tr><td>U2</td><td>10.03</td><td>10.29</td></tr></table>	Symbol	Value (unit: mm)		Min.	Max.	A	-	4.70	b	11.56	11.87	C	0.05	0.15	F	2.07	2.33	H	17.17	-	H1	25.27	25.53	P	3.04	3.30	Q	2.77	3.02	q	35.43	35.69	U1	41.02	41.28	U2	10.03	10.29
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Application Circuit



Note:

- (1) Connect the circuit according to the diagram, pay attention to anti-static, and ensure good grounding and heat dissipation when using power devices;
- (2) In order to ensure the good performance of the power module, the capacity value of the power filter and the energy storage capacitor shall be reasonably selected according to the modulation mode during pulse operation;
- (3) Power module power-up sequence VGS, VDS;
- (4) Power module power-off sequence VDS, VGS.