

Performance

- Technology: 0.5um Power HEMT
- Frequency: 0.425~0.475GHz
- Typical Pout: 61dBm
- Typical Gain: 18dB
- Typical PAE: 72%
- Bias: 50V/-3.1V~-2.8V
- Package: Metal Ceramic

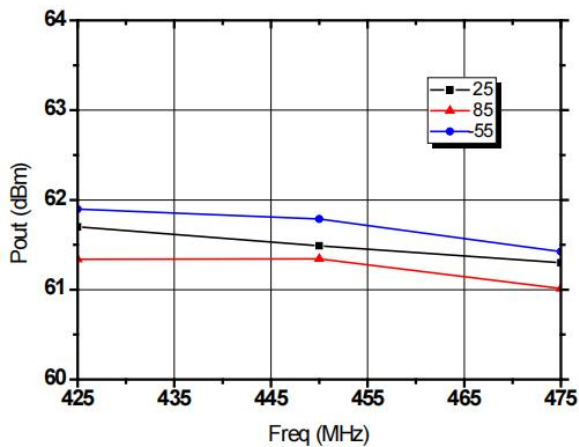


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=50\text{V}$ (PL=300us, D.C=15%), $V_g=-2.5\text{V}$, F: 0.425~0.475GHz)

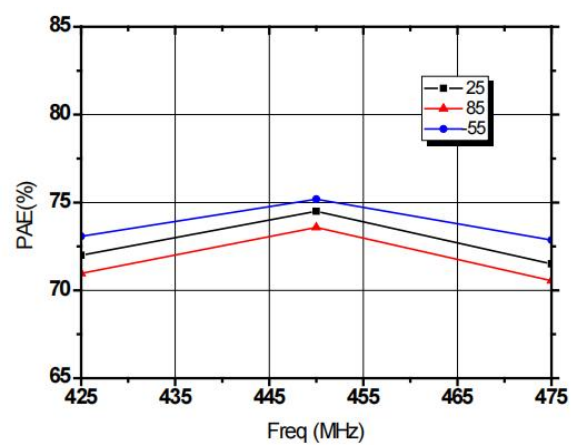
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	61	-	dBm
Gp	Power Gain	-	18	-	dB
η_{add}	Power Added Efficiency	-	72	-	%
ΔG_p	Gain Flatness	-0.5	-	+0.5	dB

Test Curves

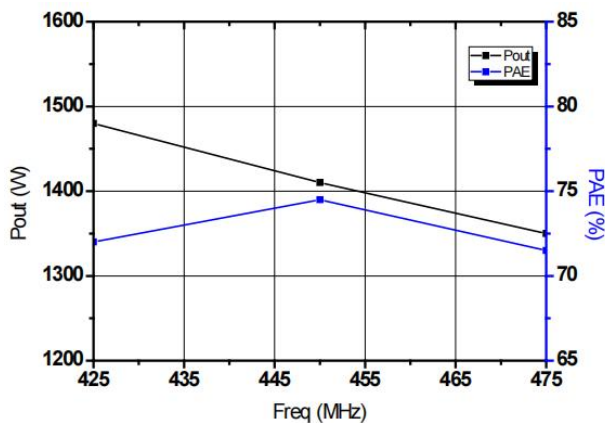
Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.



Pout、PAE&Freq.



Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	60V	
Vg	Grid Voltage	-5V	
Tch	Channel Temperature	225°C	【1】
T _A	Mounting Temperature	-45~85°C	
Tstg	Storage Temperature	-55~150°C	

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

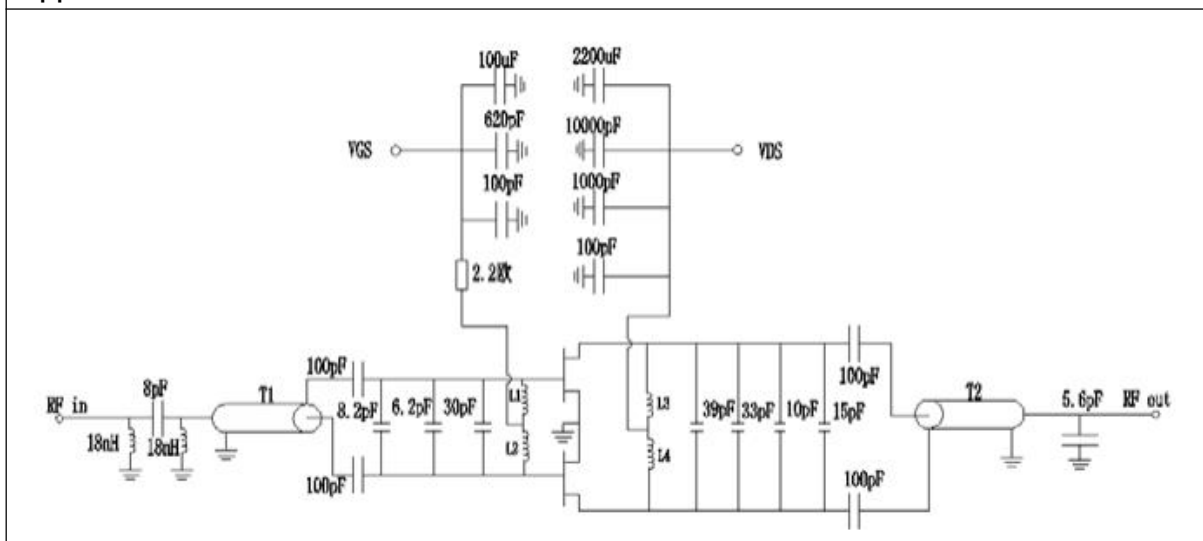
Outline Drawing

The image displays a technical outline drawing of a GaN transistor, consisting of two views: a top view and a side view. The top view shows a central rectangular area with a dashed center line, surrounded by various mounting and structural features. Dimensions labeled include U1 (total width), q (width of the central area), H1 (height of the central area), U2 (width of the base), p (width of the base), and b (width of the base). The side view shows the profile of the transistor, with dimensions labeled including H (total height), C (height of the central area), F (height of the base), Q (height of the base), and A (height of the base).

Dimension symbols

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

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.