

Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 0.22~0.28GHz
- Typical Pout: 43dBm
- Typical Gain: 18dB
- Typical PAE: 45%
- Bias: 50V/-2.8V
- Package: Metal Ceramic

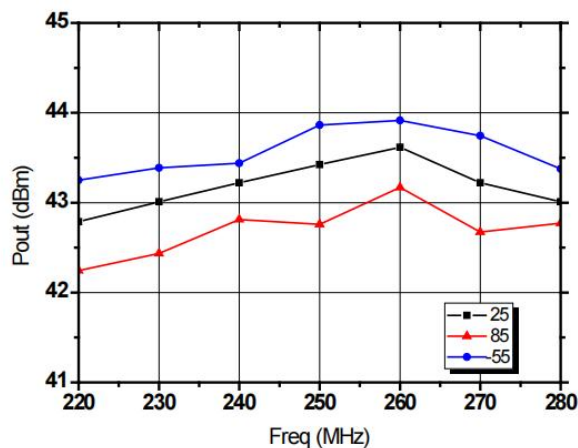


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=50\text{V}$ (PL=200us, D.C=10%), $V_g=-2.8\text{V}$, $I_d \approx 1.8\text{A}$,
F: 0.22~0.28GHz)

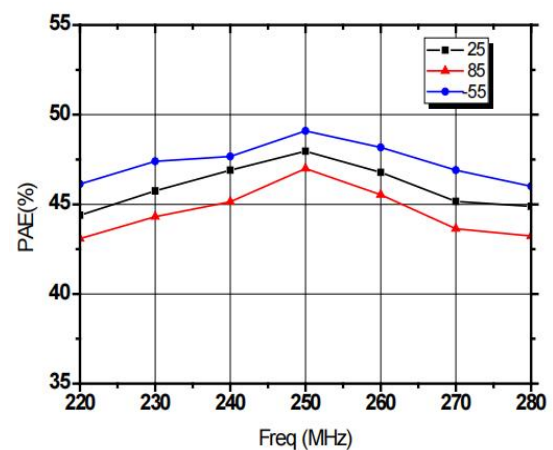
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	43	-	dBm
Gp	Power Gain	-	18	-	dB
η_{add}	Power Added Efficiency	-	45	-	%
ΔGp	Gain Flatness	-0.6	-	+0.6	dB

Test Curves

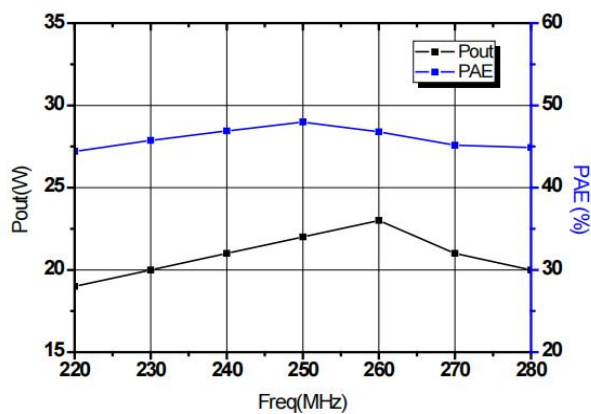
Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.



Pout, PAE&Freq.

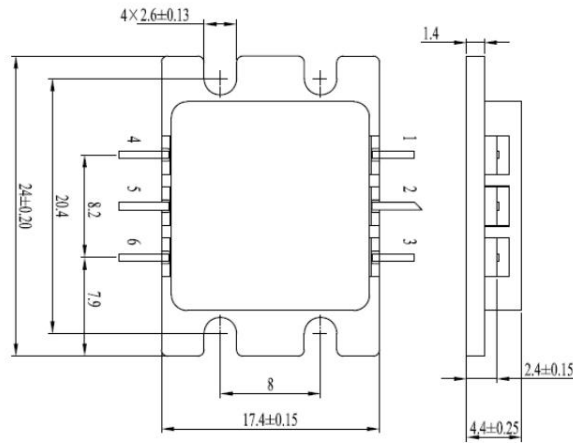


Absolute Max Ratings (TA=25°C)

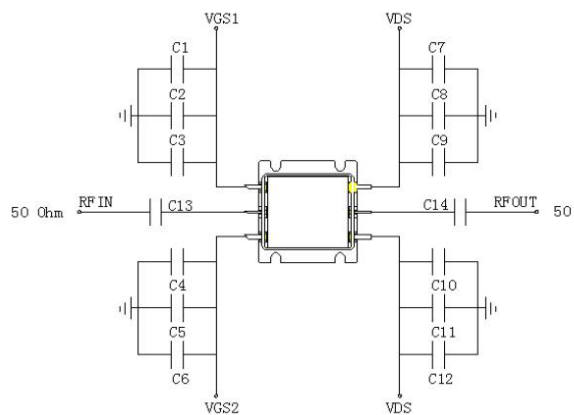
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	60V	
Vg	Grid Voltage	-5V	
Tch	Channel Temperature	225°C	【1】
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~150°C	
Tc	Operating Temperature	-55~85°C	

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

Outline Drawing



Application Circuit



No	Value
C1/C4	100 pF
C2/C5	1000 pF
C3/C6	10 uF
C7/C10	100 pF
C8/C11	1000 pF
C9/C12	47 uF
C13	20 pF
C14	20 pF

Note:

- (1) This product is a pre-matched tube, and the input and output impedance values are 50 ohms;
- (2) The power-on sequence shall be in strict accordance with the sequence of applying negative power first and then positive power. When power-off, the leakage voltage shall be reduced first and then the grid voltage shall be reduced;
- (3) This product is a high-power device. Pay attention to heat dissipation during use. The higher the shell temperature is, the shorter the service life is. The service temperature should not be higher than 80 °C;
- (4) This product is an electrostatic sensitive device. It needs to pay attention to electrostatic protection during storage and use, and it needs to be grounded well during use