

Performance

- Technology: 0.35um Power GaN HEMT
- Frequency: 2.2~2.3GHz
- Typical Pout : 40dBm(CW)
- Typical Gain: 13dB
- Typical PAE: 57%
- Bias: 28V/-4~-2V
- Impedance: 50Ω
- Package: Metal Ceramic

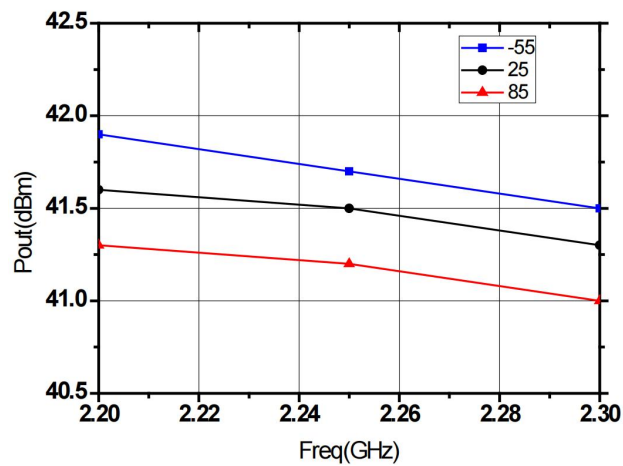


Electrical Specifications (T_A=25°C, V_d=28V, V_g= -4V~-2V, F: 2.2-2.3GHz)

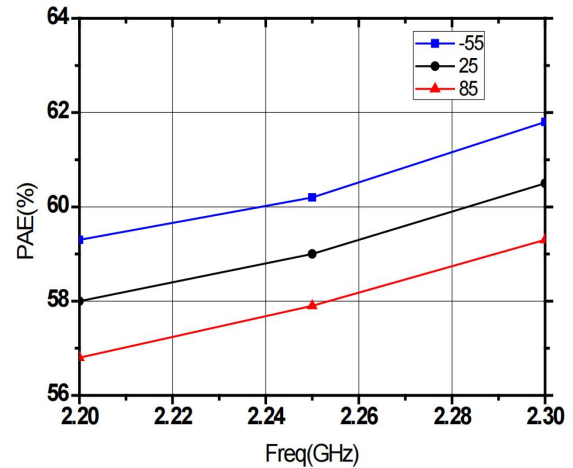
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	40	-	dBm
Gp	Power Gain	-	13	-	dB
η _{add}	Power Added Efficiency	-	57	-	%
ΔGp	Gain Flatness	-0.8	-	+0.8	dB
Rth	Thermal Resistance	-	-	12	°C/W

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

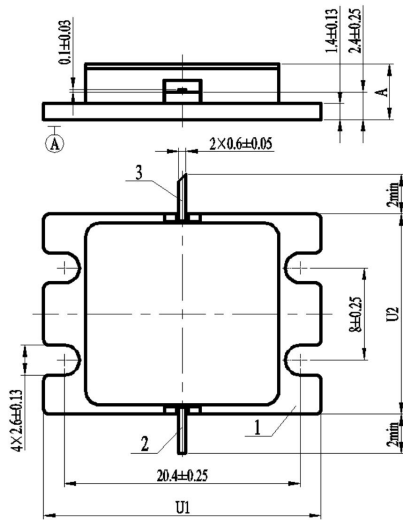


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	20W	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.

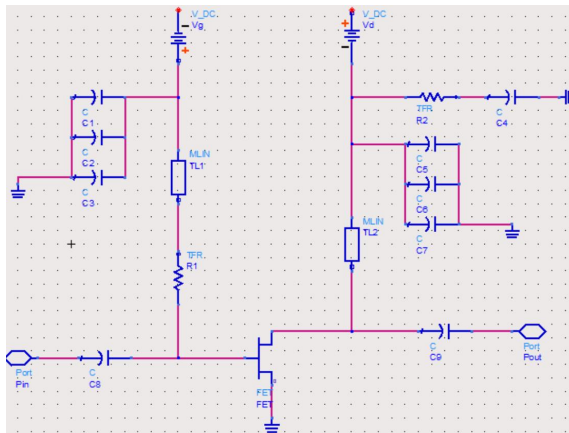
Outline Drawing



Dimension Symbol

Symbol	Value (unit: mm)	
	Min.	Max.
U1	23.80	24.20
U2	17.20	17.60
A	-	5.2

Application Circuit



Parameter	Symbol	Value	Unit
Filter capacitor	C1,C2,C3,C4, C5,C6,C7	1000	pF
DC isolation capacitance	C8,C9	4.7	pF
Stabilizing resistance	R1	15	Ω
Resistance	R2	50	Ω
Microstrip line	TL1,TL2	$\lambda/4$	-

Note:

- (1) This product is an internal matching tube, with input and output impedance values of 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.