Performance

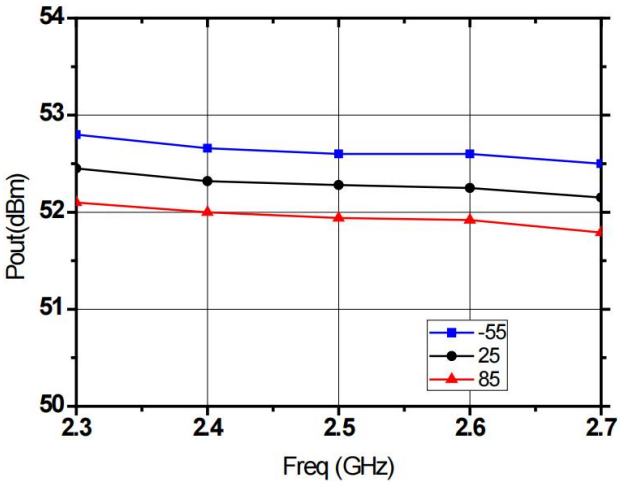
- Technology: 0.35um Power GaN HEMT
- Frequency: 2.3~2.7GHz
- Typical Pout : 52dBm
- Typical Gain: 12dB
- Typical PAE: 55%
- Bias: 28V/-3V
- Package: Metal Ceramic

Electrical Specifications (T_A=25℃,V_d=28V,Vg=-3V,F: 2.3~2.7GHz,PL=300us,D.C=20%)

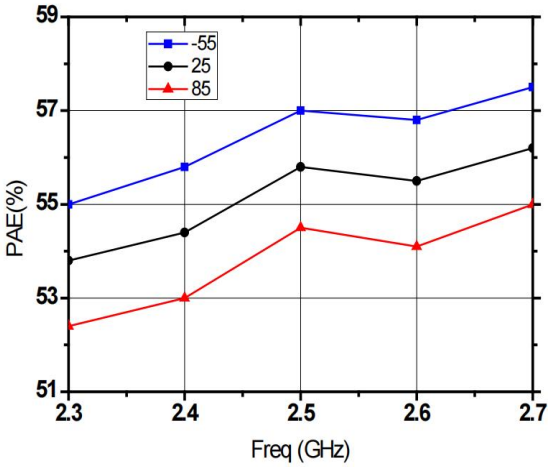
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	51.5	52	-	dBm
G	Small Signal Gain	-	15	-	dB
Gp	Power Gain	-	12	-	dB
ηadd	Power Added Efficiency	52	55	-	%
Rth	Thermal Resistance	-	-	0.55	℃/W

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

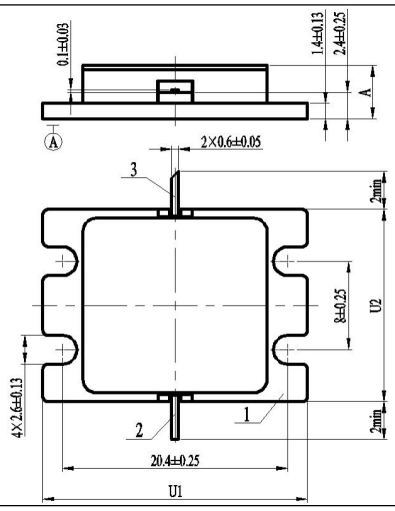


Absolute Max Ratings (T_A=25℃)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
Vg	Grid Voltage	-5V	
Tch	Channel Temperature	225℃	【1】
Tm	Mounting Temperature	300℃	1 min, N_2 Protection
Tstg	Storage Temperature	-55~175℃	
Tc	Operating Temperature	-55~85℃	

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

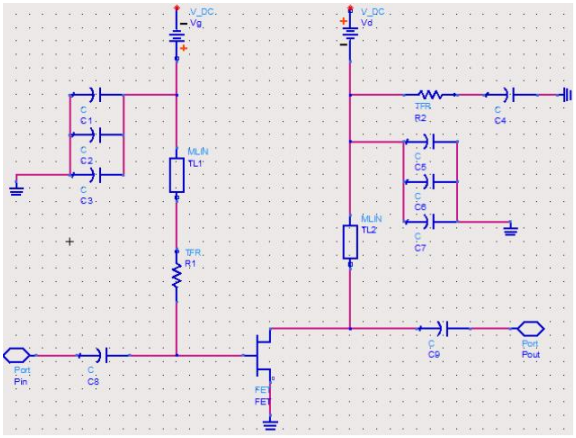
Outline Drawing



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,C4, C5,C6	1000	pF
Filter capacitor	C3,C7	100	pF
DC isolation capacitance	C8,C9	20	pF
Stabilizing resistance	R1	15	Ω
Resistance	R2	50	Ω
Microstrip line	TL1,TL2	λ/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 ℃;

(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.