

Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 1.2~1.4GHz
- Typical Pout : 51dBm
- Typical Gain: 14dB
- Typical PAE: 60%
- Bias: 28V/-3.0V@1.0A
- Package: Metal Ceramic

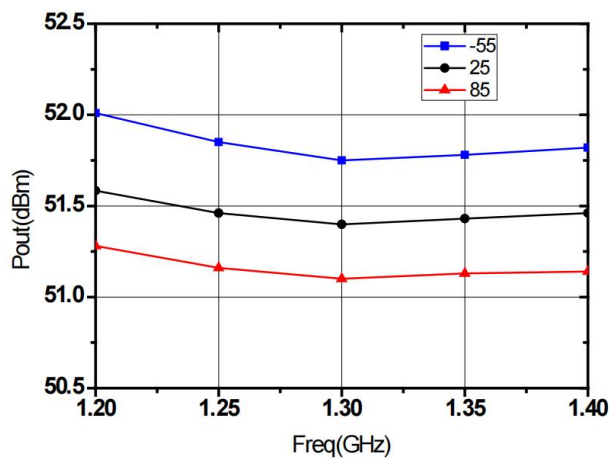


Electrical Specifications (TA=25°C, Vd=28V, Id≈1.0A, D.C=10%, F: 1.2~1.4GHz)

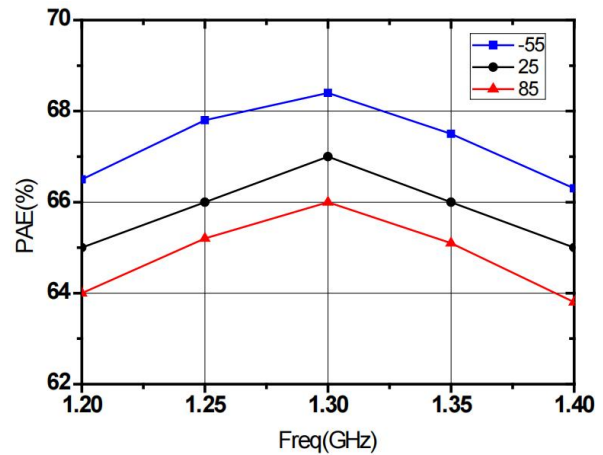
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	50.5	51	-	dBm
Gp	Power Gain	13	14	-	dB
η_{add}	Power Added Efficiency	58	60	-	%
Rth	Thermal Resistance	-	-	0.25	°C/W

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

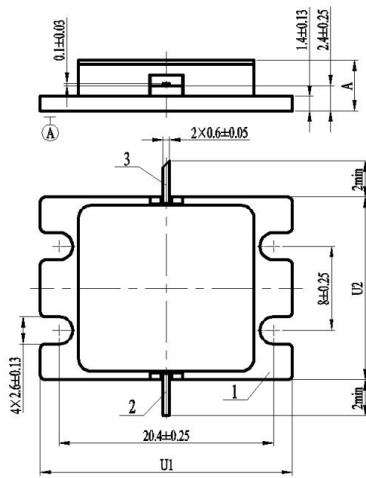


Absolute Max Ratings (TA=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	36V	
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	

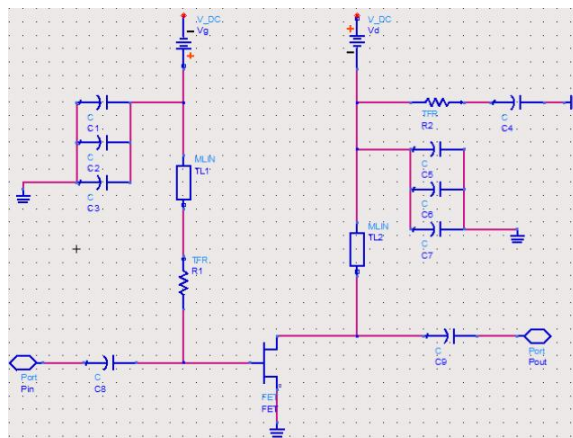
【1】 Exceeding any one or combination of these limits may cause permanent damage.

Outline Drawing



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 capacitor	C8, C9	20	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.