

Performance

- Technology: 0.35um Power GaN HEMT
- Frequency: 2.7~3.1GHz
- Typical Pout : 300W
- Typical Gain: 12dB
- Typical PAE: 55%
- Bias: 50V/-4~-2V
- Package: Metal Ceramic

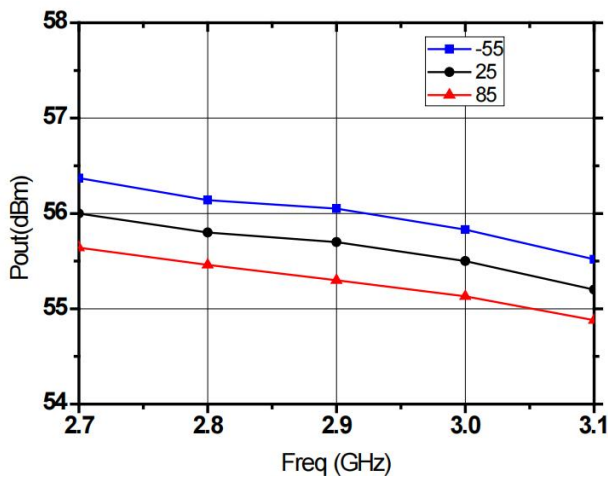


Electrical Specifications (TA=25°C,Vd=50V,Id≈0.1A,PL=200us,D.C=20%,F: 2.7~3.1GHz)

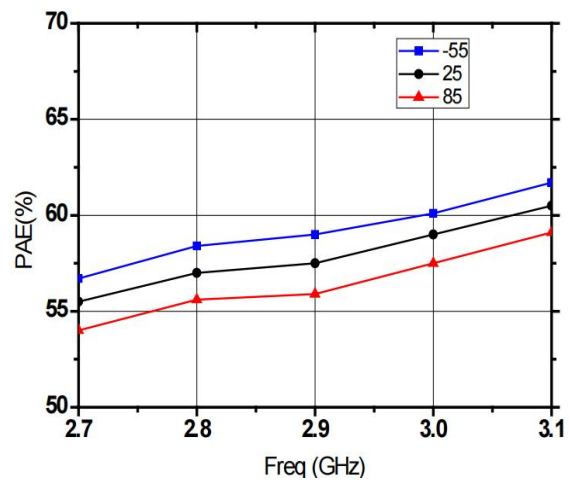
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	300	-	W
Gp	Power Gain	-	12	-	dB
η_{add}	Power Added Efficiency	-	55	-	%
ΔGp	Gain Flatness	-0.5	-	+0.5	dB
Rth	Thermal Resistance	-	-	0.22	°C/W

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

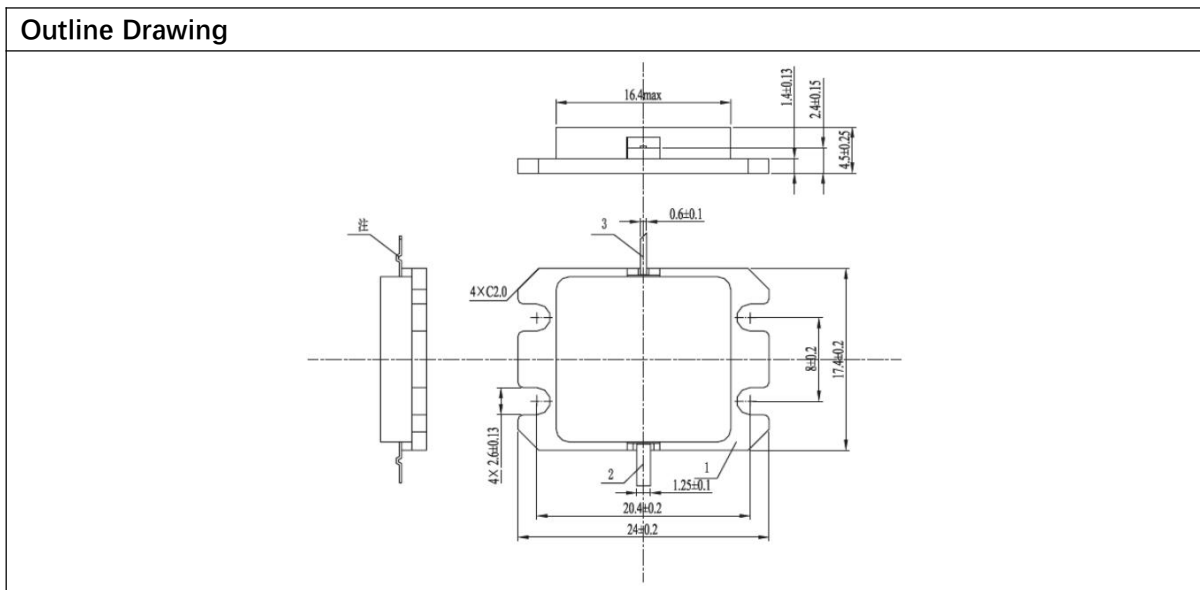


Absolute Max Ratings (TA=25°C)

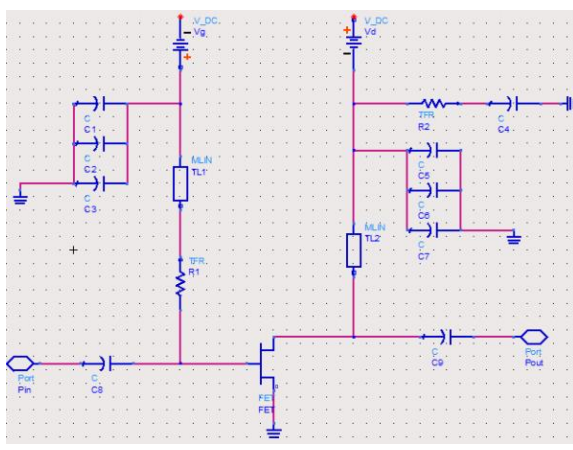
Symbol	Parameter	Value	Remark
Vd	Drain Voltage	80V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	125W	25°C
Tch	Channel Temperature	225°C	【1】
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~150°C	

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

Outline Drawing



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 °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.