

Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 1.6GHz
- Typical Pout : 49dBm
- Typical Gain: 12dB
- Typical PAE: 70%
- Bias: 28V/-2V~-3V
- Package: Metal Ceramic

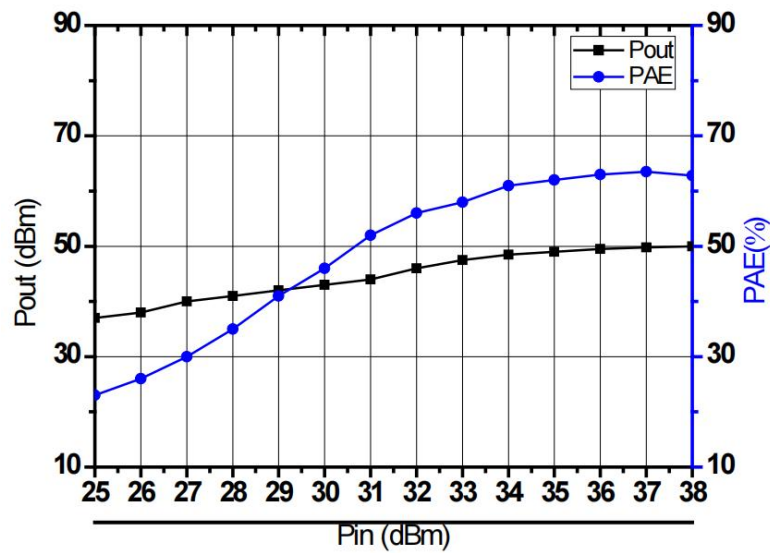


Electrical Specifications (TA=25°C, Vd=28V, Vg= -2.5V, F: 1.6GHz)

Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	49	-	dBm
Gp	Power Gain	-	12	-	dB
η_{add}	Power Added Efficiency	-	70	-	%
Rth	Thermal Resistance	-	-	1.51	°C/W

Test Curves

Pout&Pin. @ Typical Point



Absolute Max Ratings (T_A=25°C)

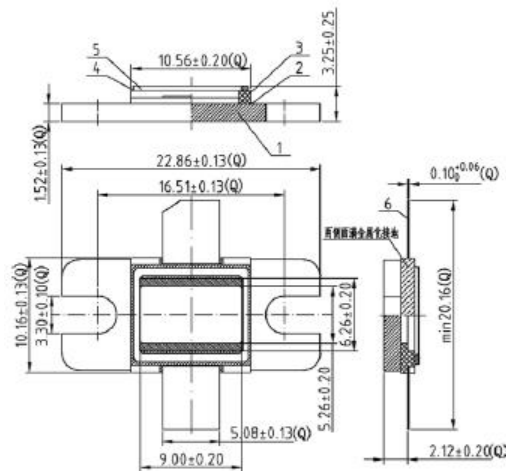
Symbol	Parameter	Value	Remark
Pout ^a	Output Power	93W	
Vd	Drain Voltage	32V	
Vg	Grid Voltage	-10~2V	
Tstg	Storage Temperature	-65~150°C	
T _A	Operating Temperature	-55~85°C	
Tc ^b	Package Temperature	-55~150°C	
Tch	Channel Temperature	225°C	【1】
V _{BR}	Drain-source Breakdown Voltage	100V	
I _{GSF}	Forward Gate Current	24mA	
P _{inmax}	Input Power	39dBm	

a When $TC > 104^\circ\text{C}$, derate linearly at $0.77\text{W}/^\circ\text{C}$.

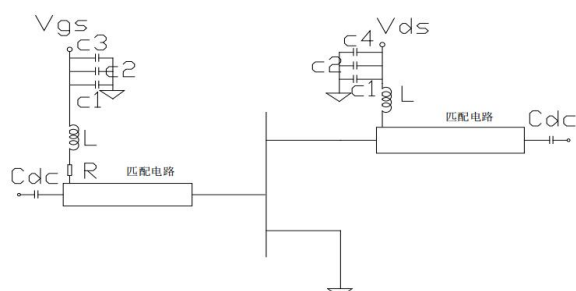
b The package temperature is the maximum temperature of the flange (the bottom of the shell nearest to the pipe core).

[1] Exceeding any one or combination of these limits may cause permanent damage.

Outline Drawing



Application Circuit



Symbol	Parameter	Symbol	Parameter
C1	100pF	Cdc	20pF
C2	1000pF	R	20Ω
C3	10uF	L	
C4	100uF		

Note:

- (1) Connect the circuit according to the diagram, pay attention to anti-static, and ensure good grounding and heat dissipation when using power devices;
- (2) In order to ensure the good performance of the power module, the capacity value of power filter and energy storage capacitor shall be reasonably selected according to the modulation mode during pulse operation.