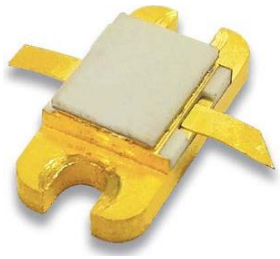
Performance



- Technology: 0.5um Power GaN HEMT
- Frequency: 0.138~0.138GHz
- Typical Pout: 40dBm(CW)
- Typical Gain: 17dB
- Typical PAE: 65%
- Bias: 30V/-2.8V
- Package: Metal Ceramic

Electrical Specifications (T_A=25℃, V_d=30V(CW), Vg=-2.8V, F: 0.138~0.138GHz)

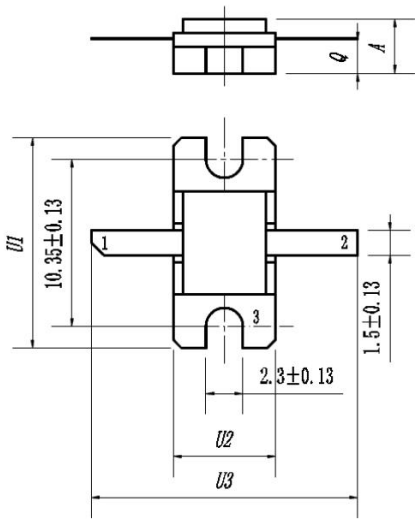
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	40	-	dBm
Gp	Power Gain	-	17	-	dB
ηadd	Power Added Efficiency	-	65	-	%

Absolute Max Ratings (T_A=25℃)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	50V	
Vg	Grid Voltage	-5V	
Tch	Channel Temperature	225℃	【1】
Tm	Mounting Temperature	300℃	1 min, N_2 Protection
Tstg	Storage Temperature	-55~125℃	
Tc	Operating Temperature	-55~85℃	

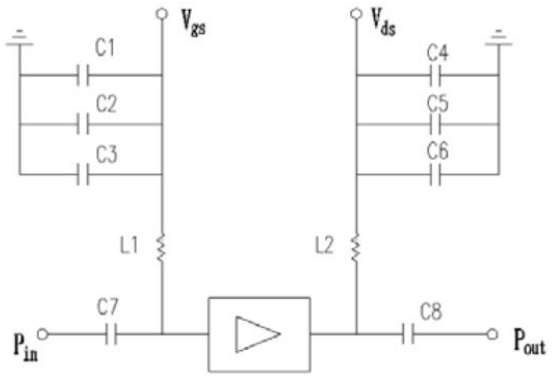
【1】Exceeding any one or combination of these limits may cause permanent damage.

Outline Drawing	Dimension symbols



Symbol	Value (unit: mm)		
	Min.	Typ.	Max.
A	-	3.38	3.80
U1	12.80	13.00	13.20
U2	6.15	6.35	6.55
U3	16.26	16.5	16.76
Q	1.90	2.07	2.24

Application Circuit	



No	Value
L1、L2	100nH
C1、C4	100pF
C2、C5	1000pF
C3、C6	>10uF(electrolytic capacitor or tantalum capacitor)
C7、C8	620pF

Note:

(1) This product is a pre-matched tube, and the input and output impedance values are 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.