

Performance

- Technology: 0.35um Power GaN HEMT
- Frequency: 2.7~3.5GHz
- Typical Pout : 56dBm
- Typical Gain: 12dB
- Typical PAE: 50%
- Bias: 48V/-3V
- Package: Metal Ceramic

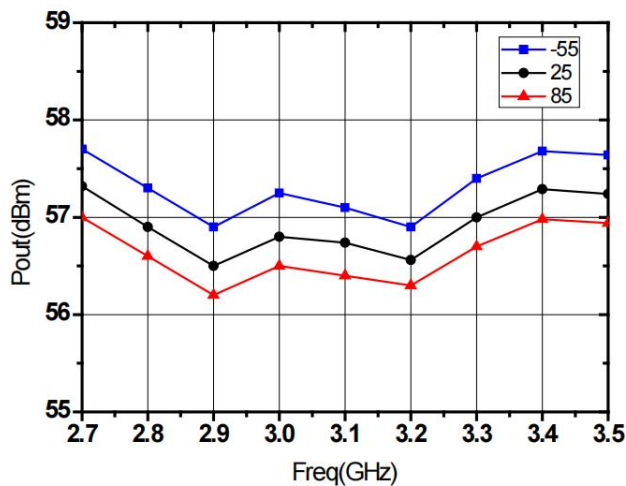


Electrical Specifications ($T_A=25^{\circ}\text{C}$, $V_d=48\text{V}$, $V_g=-3\text{V}$, $t=100\mu\text{s}$, $D=10\%$, $F: 2.7\sim 3.5\text{GHz}$)

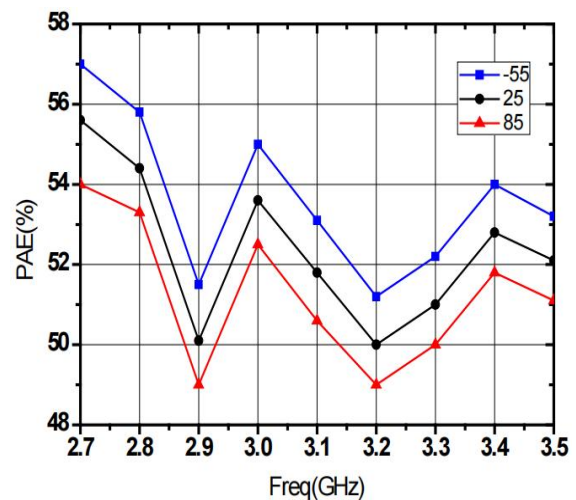
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	-	56	-	dBm
Gp	Power Gain	-	12	-	dB
η_{add}	Power Added Efficiency	-	50	-	%
ΔG_p	Gain Flatness	-0.6	-	+0.6	dB
Rth	Thermal Resistance	-	-	0.22	$^{\circ}\text{C/W}$

Test Curves

Pout&Freq. @ Different Temp.



PAE&Freq. @ Different Temp.

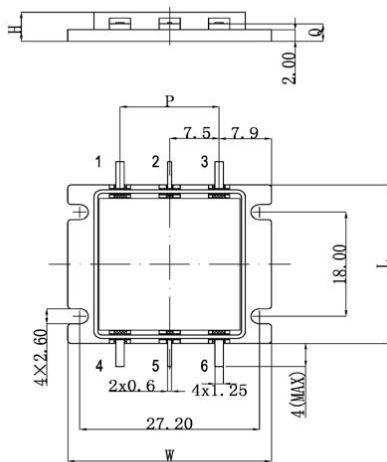


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
Vd	Drain Voltage	80V	
Vg	Grid Voltage	-5V	
Pd	DC Dissipation	250W	25°C
Tch	Channel Temperature	175°C	【1】
Tm	Mounting Temperature	300°C	1 min, N2 Protection
Tstg	Storage Temperature	-55~175°C	

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

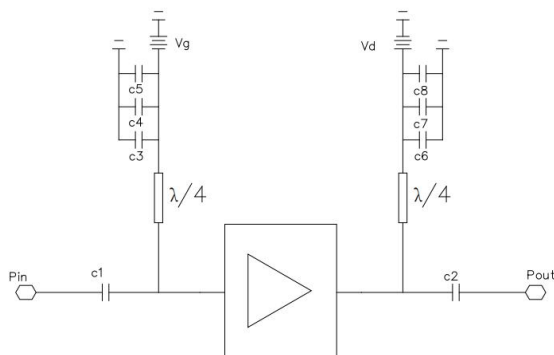
Outline Drawing



Dimension Symbol

Symbol	Value (unit: mm)		
	Min.	Typ.	Max.
H	-	-	6.0
W	30.6	30.8	31.0
L	27.2	27.4	27.6
Q	2.8	3.0	3.2
P	14.8	15.0	15.2

Application Circuit



Capacitance	Value
C1、C2	20pF
C3、C6	100pF
C4、C7	1000pF
C5、C8	>10uF (Electrolytic capacitor or tantalum capacitor)

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.