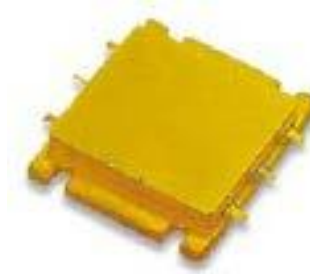


Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 1.5~1.65GHz
- Typical Pout : 54dBm(CW)
- Typical Gain: ≥ 13 dB
- Typical PAE: $\geq 60\%$
- Bias: 36V/-2.8V
- Package: Metal Ceramic

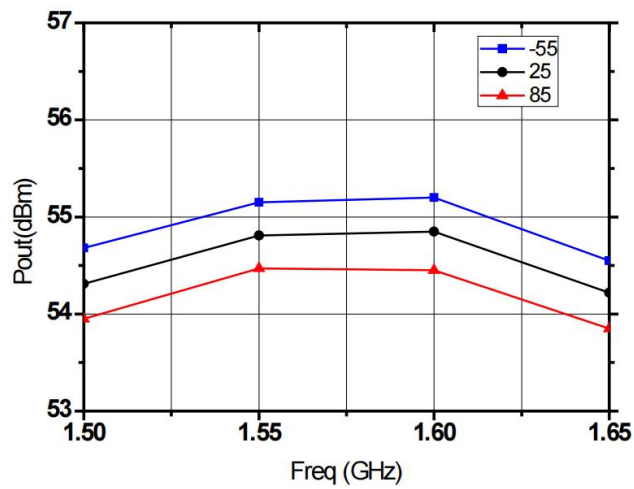


Electrical Specifications ($T_A=25^\circ\text{C}$, $V_d=36\text{V}$, $V_g=-2.8\text{V}$, $F: 1.5\sim 1.65\text{GHz}$, $P_{in}=41\text{dBm}$)

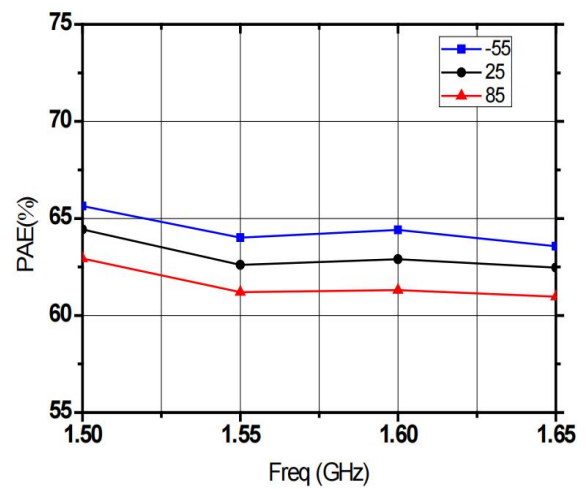
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	54	-	-	dBm
Gp	Power Gain	13	-	-	dB
η_{add}	Power Added Efficiency	60	-	-	%
ΔG_p	Gain Flatness	-0.8	-	+0.8	dB
Rth	Thermal Resistance	-	-	0.48	$^\circ\text{C}/\text{W}$

Test Curves

Pout&Freq. @ Different Temp.



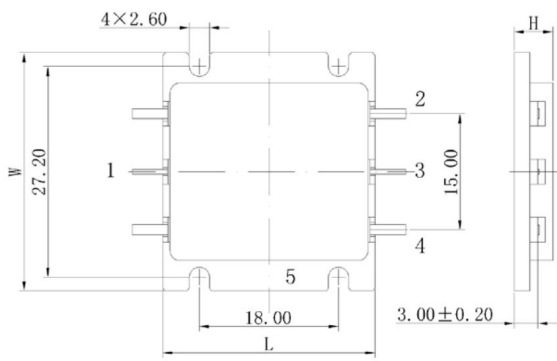
PAE&Freq. @ Different Temp.

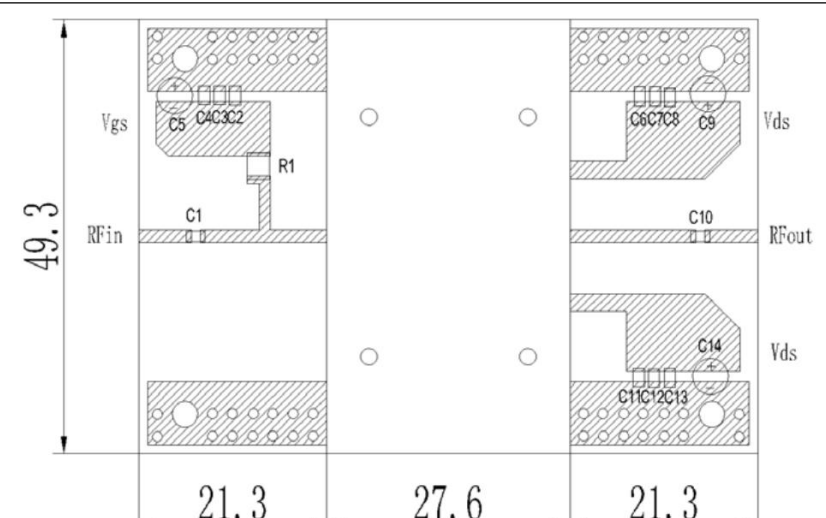


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	50V	
V _g	Grid Voltage	-1.5~-10V	
T _{ch}	Channel Temperature	225°C	【1】
T _m	Mounting Temperature	300°C	1 min, N ₂ Protection
T _A	Operating Temperature	-55~85°C	
T _{stg}	Storage Temperature	-55~125°C	

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

Outline Drawing		Dimension symbols			
		Symbol	Value (unit: mm)		
			Min.	Typ.	Max.
		W	30.6	30.8	31.0
		L	27.2	27.4	27.6
		H	4.9	5	5.1
		No	Function	No	Function
		1	V _g , RFin	4	V _d
		2	V _d	5	GND
		3	RFout		

Application Circuit	
	

Symbol	Value	Package	Note
C1、C10	22pF	0805	高 Q 值射频电容
C2、C6、C11	27pF	0805	
C3、C7、C12	1000pF	0805	
C4、C8、C13	10nF	0805	
C5、C9、C14	47uF	铝电解电容	
R1	2Ω	1210	

Note:

- (1) 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;
- (2) This product is a high-power GaN device. Pay attention to maintain good heat dissipation during use. Insufficient heat dissipation will cause the temperature rise of the tube core, affecting Performance and service life.
- (3) 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.