

Performance

- Technology: 0.5um Power GaN HEMT
- Frequency: 1.15~1.24GHz
- Typical Pout : 51dBm(CW)
- Typical Gain: ≥ 14 dB
- Typical PAE: $\geq 68\%$
- Bias: 28V/-3.3V
- Package: Metal Ceramic

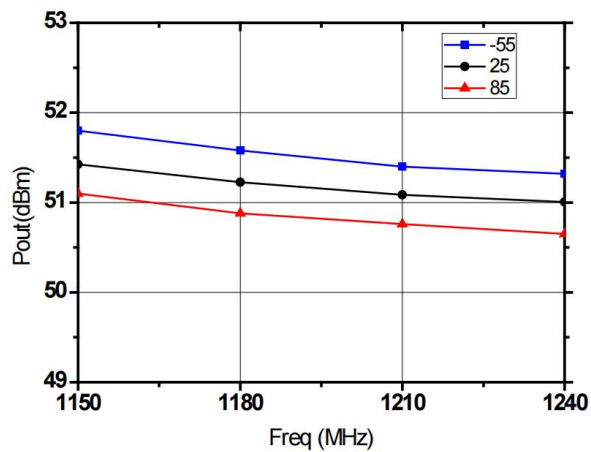


Electrical Specifications (TA=25°C, Vd=28V, Vg= -3.3V, F: 1.15~1.24GHz, CW)

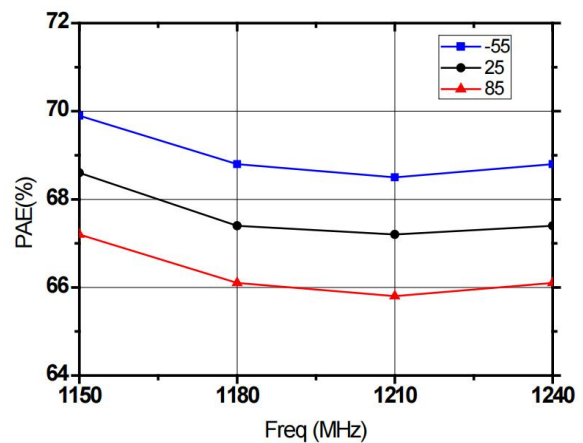
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	51	-	-	dBm
Gp	Power Gain	14	-	-	dB
η_{add}	Power Added Efficiency	68	-	-	%
ΔGp	Gain Flatness	-0.4	-	+0.4	dB
Rth	Thermal Resistance	-	-	0.95	°C/W

Test Curves

Pout&Freq. @ Different Temp.



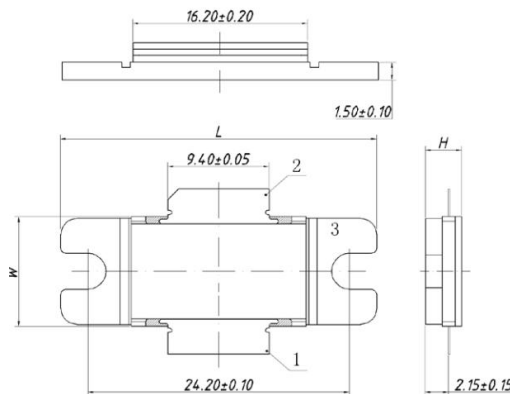
PAE&Freq. @ Different Temp.

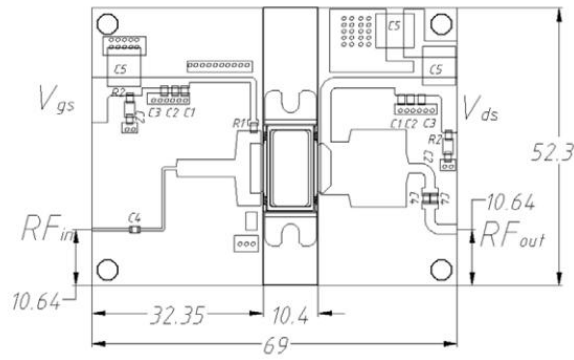


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	36V	
V _g	Grid Voltage	-5V	
T _{ch}	Channel Temperature	225°C	【1】
T _m	Mounting Temperature	300°C	1 min, N ₂ Protection
T _{stg}	Storage Temperature	-55~125°C	
T _A	Operating Temperature	-55~85°C	

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

Outline Drawing	Dimension Symbols																			
	<table><tr><th rowspan="2">Symbol</th><th colspan="3">Value (unit: mm)</th></tr><tr><th>Min.</th><th>Typ.</th><th>Max.</th></tr><tr><td>W</td><td>10.05</td><td>10.2</td><td>10.35</td></tr><tr><td>L</td><td>29.2</td><td>29.3</td><td>29.4</td></tr><tr><td>H</td><td>4.1</td><td>4.3</td><td>4.5</td></tr></table>	Symbol	Value (unit: mm)			Min.	Typ.	Max.	W	10.05	10.2	10.35	L	29.2	29.3	29.4	H	4.1	4.3	4.5
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Application Circuit				
	Symbol	Value	Package	Note
	C1	56pF	0805	
	C2	1000pF	0805	
	C3	10nF	0805	
	C4	27pF	0805	RF capacitance with high Q value
	C5	63pF	CAK55-F 4-63V-6 8uF-K	
	R1	2Ω	0805	
	R2	51 Ω	0805	

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.