

Performance

- Technology: 0.35um Power GaN HEMT
- Frequency: 2.7~3.5GHz
- Typical Pout : 52dBm
- Typical Gain: 12dB
- Typical PAE: 55%
- Bias: 28V/-3V
- Impedance: 50Ω
- Package: Metal Ceramic

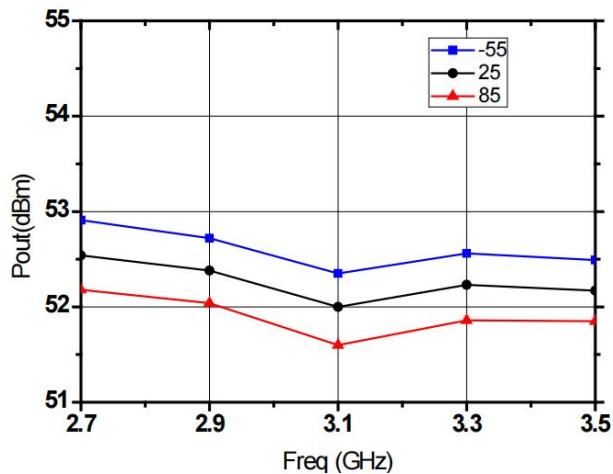


Electrical Specifications (TA=25°C, Vd=28V, Id≈9.5A, PL=1ms, D.C=20%, F: 2.7~3.5GHz)

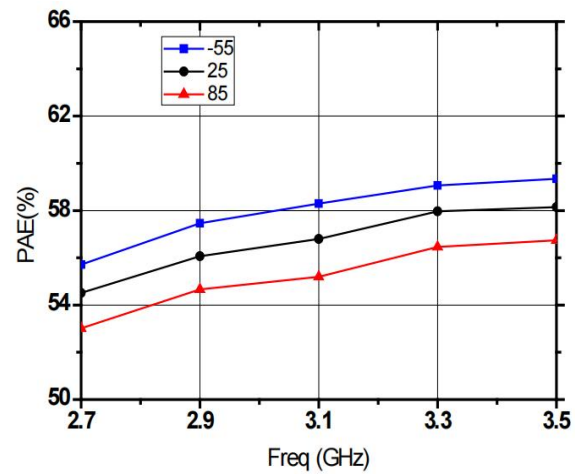
Symbol	Parameter	Min	Typical	Max	Unit
Pout	Output Power	52	52.5	-	dBm
Gp	Power Gain	10	10.5	-	dB
η_{add}	Power Added Efficiency	54	55	-	%
ΔGp	Gain Flatness	-0.5	-	+0.5	dB
Rth	Thermal Resistance	-	-	0.32	°C/W

Test Curves

Pout&Freq. @ Different Temp.



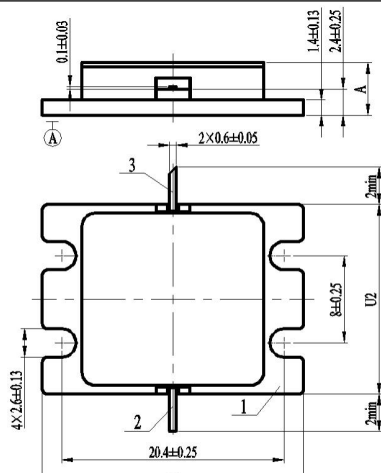
PAE&Freq. @ Different Temp.

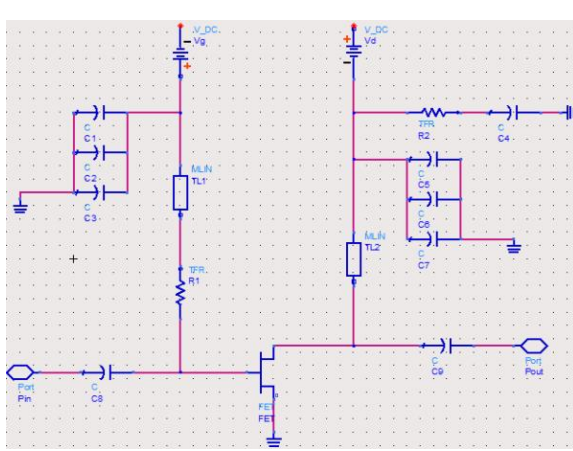


Absolute Max Ratings (T_A=25°C)

Symbol	Parameter	Value	Remark
V _d	Drain Voltage	36V	
V _g	Grid Voltage	-5V	
P _d	DC Dissipation	125W	25°C
T _{ch}	Channel Temperature	225°C	【1】
T _m	Mounting Temperature	300°C	1 min, N ₂ Protection
T _{stg}	Storage Temperature	-55~150°C	

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

Outline Drawing	Dimension Symbol														
 The drawing shows a GaN Transistor with the following dimensions and features: Top View: - Overall width: $U1 = 20.4 \pm 0.25$ - Overall height: $U2 = 8 \pm 0.25$ - Distance between mounting holes: $2 \times 0.6 \pm 0.05$ - Mounting hole diameter: $\phi 2.6 \pm 0.13$ - Distance from mounting hole to edge: 1.4 ± 0.13 - Distance from mounting hole to center: 2.4 ± 0.25 - Distance from mounting hole to edge (bottom): 0.1 ± 0.05 Side View: - Mounting hole diameter: $\phi 2.6 \pm 0.13$ - Mounting hole depth: 2 mm - Mounting hole position: $2 \times 0.6 \pm 0.05$ - Mounting hole diameter: $\phi 2.6 \pm 0.13$ - Mounting hole depth: 2 mm	<table><tr><th rowspan="2">Symbol</th><th colspan="2">Value (unit: mm)</th></tr><tr><th>Min.</th><th>Max.</th></tr><tr><td>U1</td><td>23.80</td><td>24.20</td></tr><tr><td>U2</td><td>17.20</td><td>17.60</td></tr><tr><td>A</td><td>-</td><td>5.2</td></tr></table>	Symbol	Value (unit: mm)		Min.	Max.	U1	23.80	24.20	U2	17.20	17.60	A	-	5.2
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Application Circuit																															
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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.