

NDNM01023

8.5-9.6GHz GaN Internally Matched HEMT

► Features

- Internally Matched GaN HEMT
- Frequency range: 8.5-9.6 GHz
- Output Power: 50W (Typ.)
- Gain: 9dB
- PAE: 40% (Typ.)
- Bias: 28V/-3V
- Hermetically Sealed Package



► General Description

NDNM01023 is a GaN-HEMT that is internally matched for 8.5-9.6GHz with high power and efficiency. The transistor provides 50W output power, 9dB gain and 40% power add efficiency at 28V.

► Absolute Maximum Ratings (TA=25 °C)

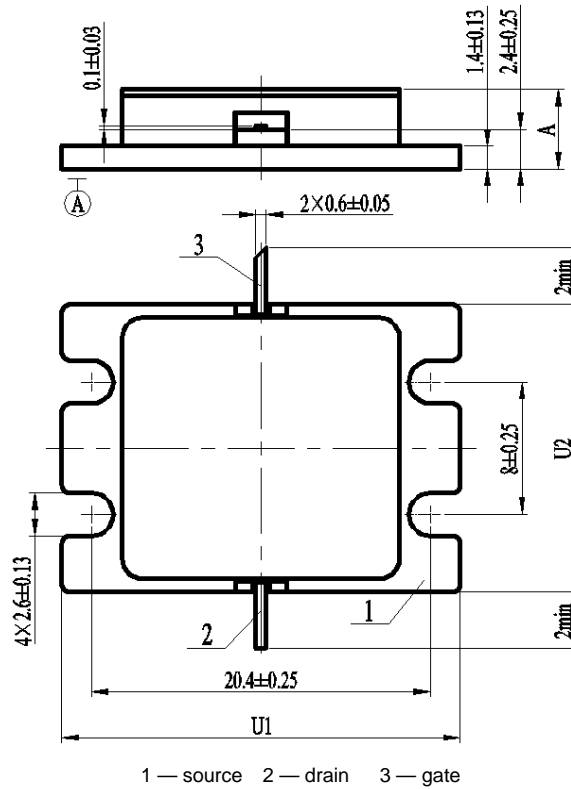
Symbol	Parameter	Value	Notes
V _{ds}	Drain Bias Voltage	32V	
V _{gs}	Gate Bias Voltage	-5V	
T _{ch}	Channel Temperature	175°C	
T _{stg}	Storage Temperature	-55~175°C	

Any of the stresses above the listed ratings may cause permanent damage.

► **Specifications** ($T_A=25\text{ }^\circ\text{C}$)

Symbol	Parameter	Conditions	Value			Units
			Min	Typical	Max	
P_{out}	Output Power	Vd=28V, Vg=-3V F: 8.5-9.6GHz	-	47	-	dBm
G_p	Power Gain		-	9	-	dB
η_{add}	Power Added Efficiency		-	40	-	%
ΔG_p	Gain Flatness		-0.8	-	+0.8	dB

► **Package size**

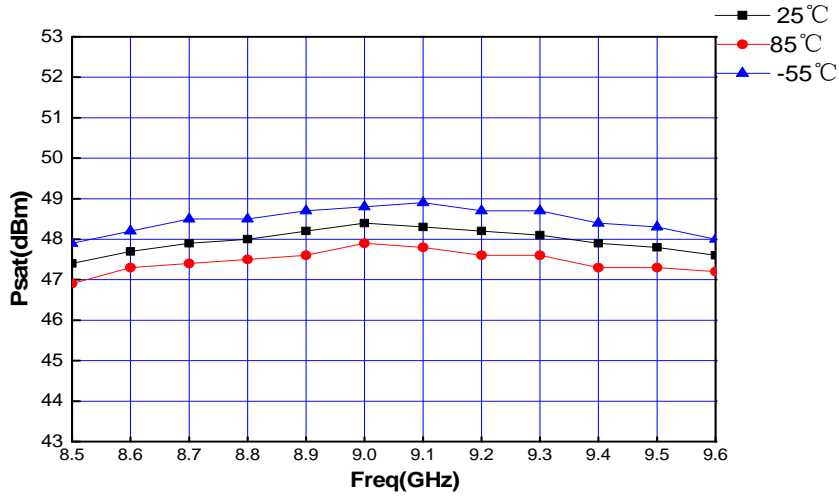


Unit: mm

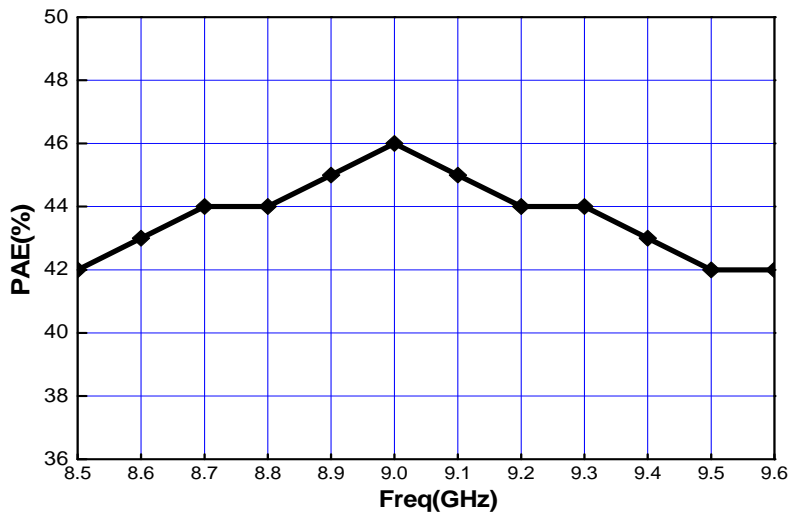
Symbol	Value	
	Min	Max
$U1$	23.80	24.20
$U2$	17.20	17.60
A	-	5.2

► Typical Performances ($T_A=25\text{ }^\circ\text{C}$)

Output Power



Power Added Efficiency (PAE)



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