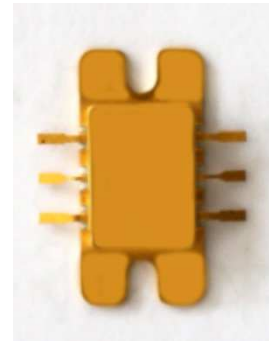


# NDNM02007

## 9-10GHz GaN power amplifier module

### ► Features

- Frequency range:9-10GHz
- Saturated Output Power: 45dBm
- Saturated Power Gain: 22 dB
- PAE: 35 %
- Bias Voltage: 28 V/-2.5 V
- Dimensions:18.03 mm×8.7 mm×2.5 mm



### ► General Description

The NDNM02007 is a broadband high power amplifier module designed using GaN PHEMT process. This amplifier provides 22dB of gain and 45dBm of saturated power by 28V drain supply. The NDNC02007 is an ideal chip for T/R Module, wireless communication and so on.

### ► Absolute Maximum Ratings

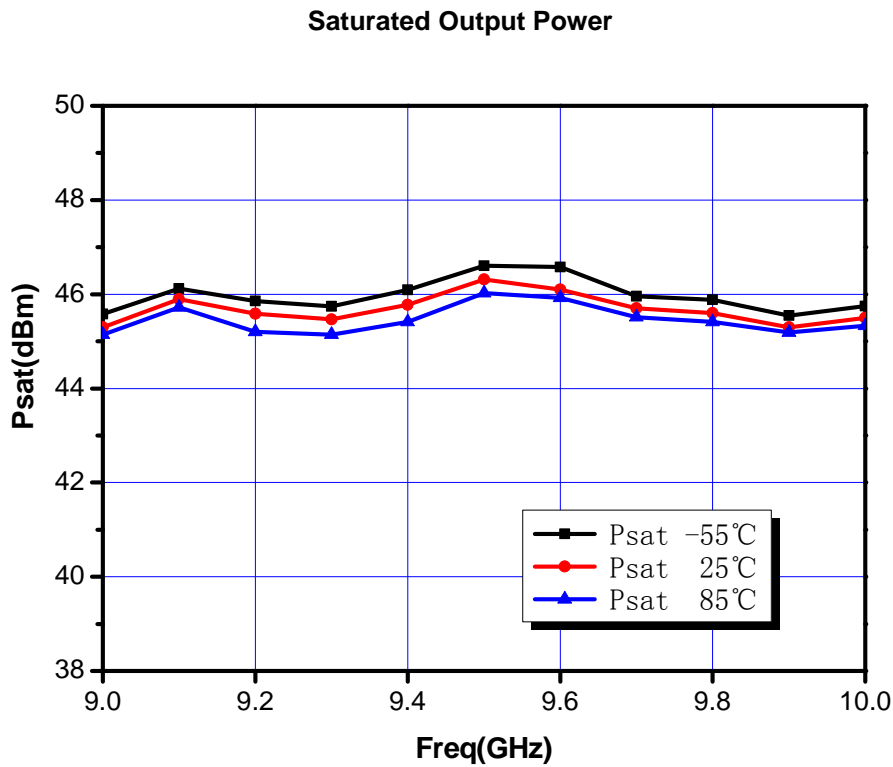
Symbol	Parameter	Value	Notes
Vd	Drain Bias Voltage	32V	
Id	Drain Bias Current	5A	
Vg	Gate Bias Voltage	-5V	
Ig	Gate Bias Current	50mA	
Pd	DC Power	180W	25°C
Pin	Input Power	28dBm	
Tch	Channel Temperature	175°C	[1]
Tm	Mounting Temperature	300°C	1min, N <sub>2</sub> protection
Tstg	Storage Temperature	-55~175°C	

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

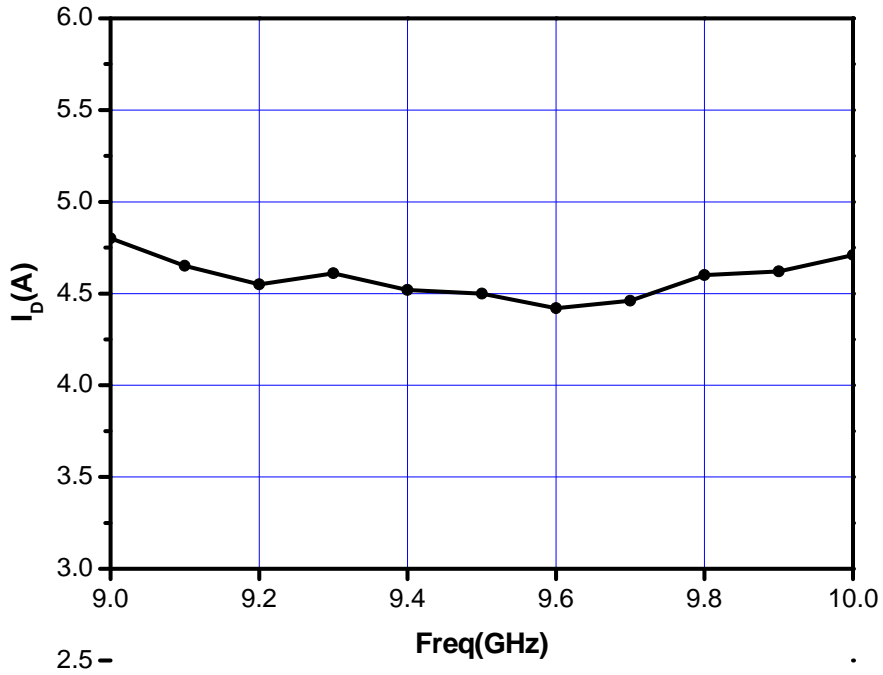
► **Specifications** ( $T_A=25^\circ\text{C}$ )

Symbol	Parameter	Conditions	Value			Units
			Min	Typical	Max	
Pout	Saturated Power	Vd=28V, Vg=-2.5V, Freq: 9-10GHz Pin=23dBm		45		dBm
Gp	Power Gain			22		dB
$\eta$ add	PAE			35		%

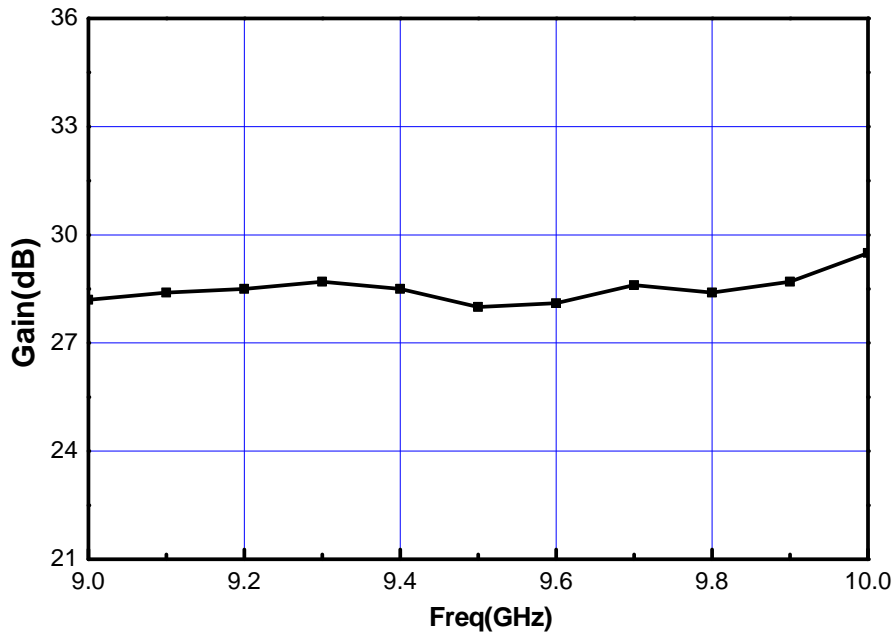
► **Performance vs. Temperature**



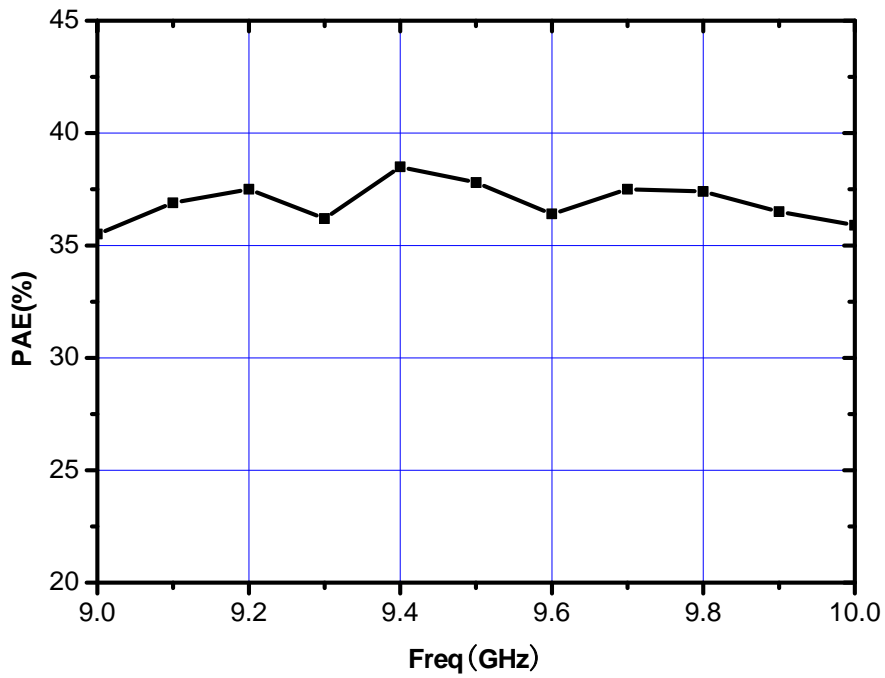
Drain Current



Linear Gain



Power Added Efficiency



► Outline Drawing (Units: um)

