METDA Semiconductor

NC11609C-618P10

GaN MMIC Power Amplifier, 6～18GHz

Features

- Frequency：6～18GHz
- Psat：40dBm
- P.A.E.:20％
- Power Gain：16dB
- CW

Electrical Specification（TA=+25℃, Vd=+28V，Vg=-1.6V，CW）

Parameter	Min.	Typ.	Max.	Unit
Frequency	6-18			GHz
Psat	40	41	-	dBm
P.A.E.	20	25	-	％
Power Gain	16	17	-	dB
VSWRin	-	2.5	-	—
Dynamic Operating Current		2.2		A

Note：1）All chips have been on-chip 100% DC and RF tested .

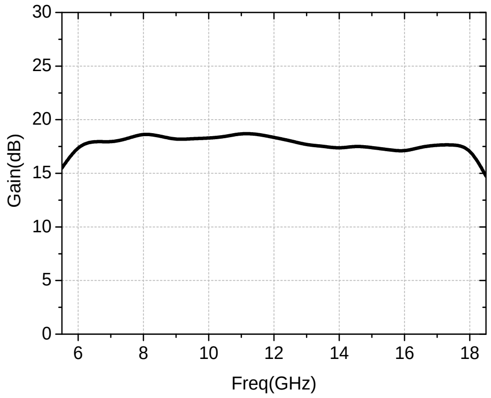
2) RF Test Condition：Vd=28V，Vg=-1.6V.

Limited Rating Values

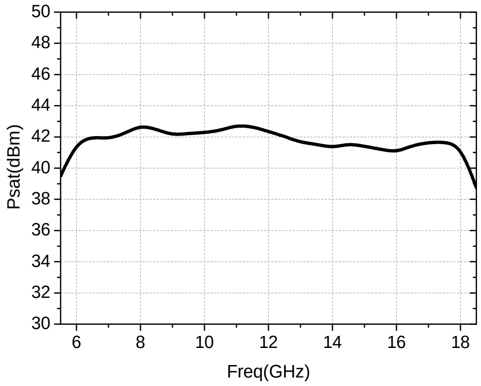
Max Input Vd	+32V
Max Input Power	+30dBm
Storage Temperature	-65℃～+150℃
Operating Temperature	-55℃～+125℃

Typical Testing Curves

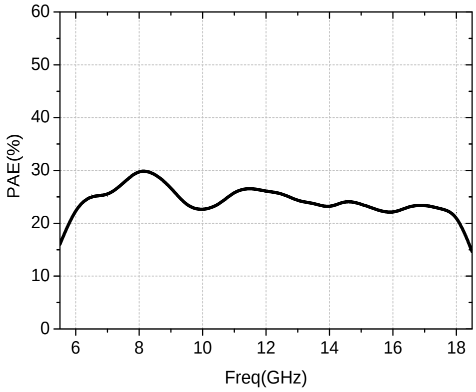
CW Power Gain VS Frequency



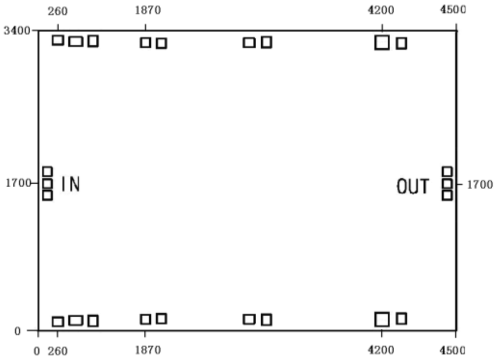
CW Psat VS Frequency



CW P.A.E. VS Frequency

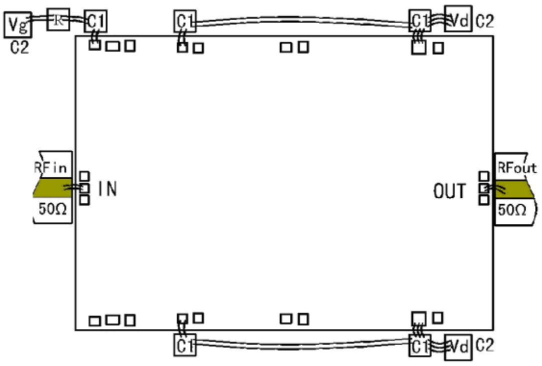


Dimensions and Outline



Note：The unit is um. Dimension of Input/Output Pad: 100×100um^2.

Assembly Diagram



Note：External capacitor c1=100pF,c2=0.01uF，R=50Ω. Diameter of bonding wires is 25um.

Attention

1） 2 bonding wires should be used for Input/Output. The length of the wires should be shorter than 350μm.
2） Bonding with 80/20 Au/Sn. The bonding temperature should be lower than 300℃ and the time should be less than 30 seconds.
3） Antistatic protection should be taken.