

# VRFA0061-PLT



## 70 Watts X-Band GaN Amplifier Pallet

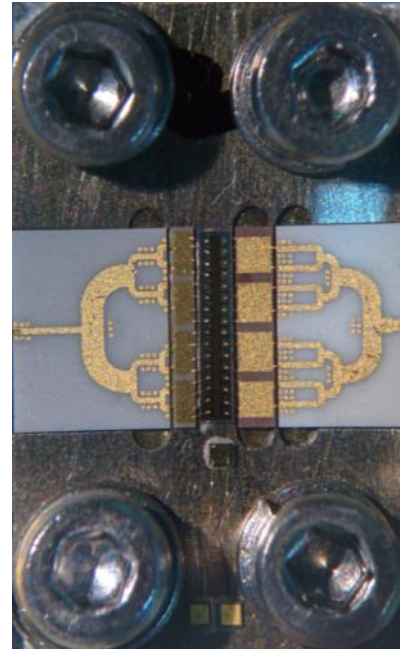
Advance Product Information

### Features

- Frequency Range: 8.5 - 10 GHz
- 80 Watts Maximum Power
- PAE typ. 40%
- >8 dB Saturated Gain
- 50Ω matched RF ports
- Pallet CuW 10 x 16 x 0.5 mm including fixings (10 x 5.2 mm active area)

### Description

The VRFA0061-PLT is a high power GaN amplifier pallet available from VIPER RF. It demonstrates typically 8dB of operating gain and up to 80 Watts of peak saturated power within the X Band frequency range; the device uses a 28-35V drain supply, and is biased through its RF input and output ports. The I/O ports may be connected through bondwires or 0.5mm solder tabs. Typical applications include saturated and linear transmitters, in particular in the Defence and Space sectors.



### Electrical Characteristics

Parameter	Specification			Unit
	Max.	Typ.	Min.	
Frequency Bandwidth	8.5		10	GHz
Small Signal Gain		10-13		dB
PAE		40		%
Operating Gain		8-10		dB
Output Power		49		dBm

Measurement Conditions:  $T=+25^{\circ}\text{C}$ ,  $V_{DD}=+35\text{V}$ , Pulse Length 100 $\mu\text{s}$ , Duty Cycle 10%

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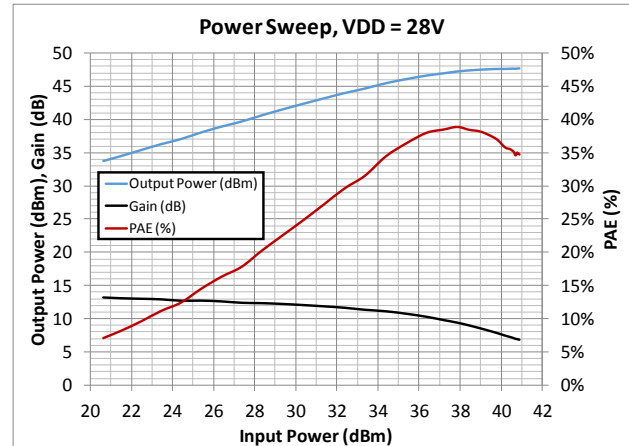
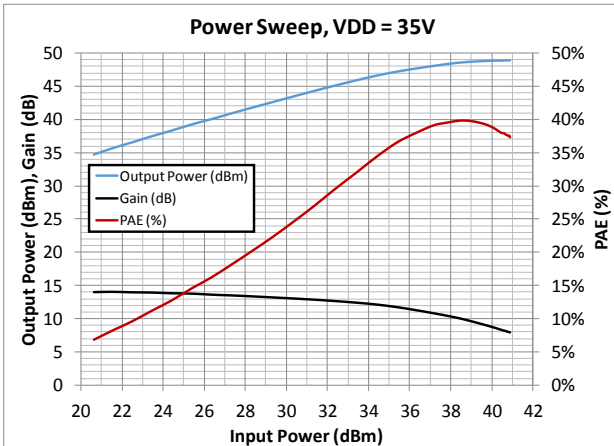


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### Measured Performance in Test Fixture

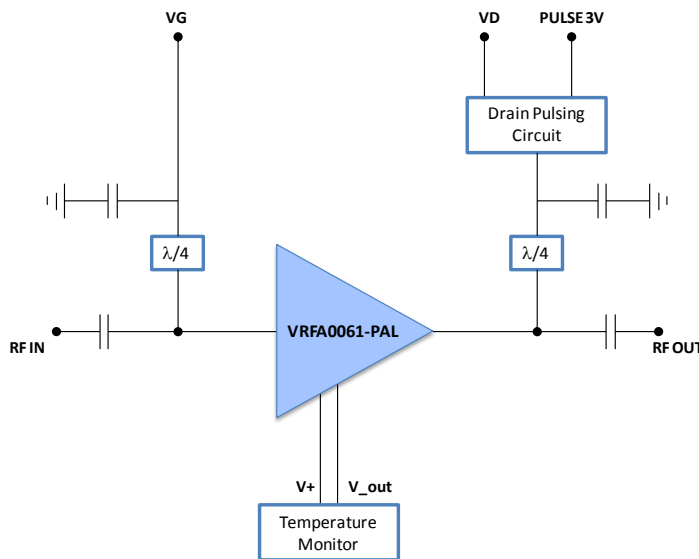
T=+25°C, Frequency = 8.5GHz, Pulse Length 100µs, Duty Cycle 10%



### Recommended Absolute Maximum Ratings

Please consult VIPER RF for recommended AMR and operating conditions

### Application Circuit



# VRFA0061-PLT

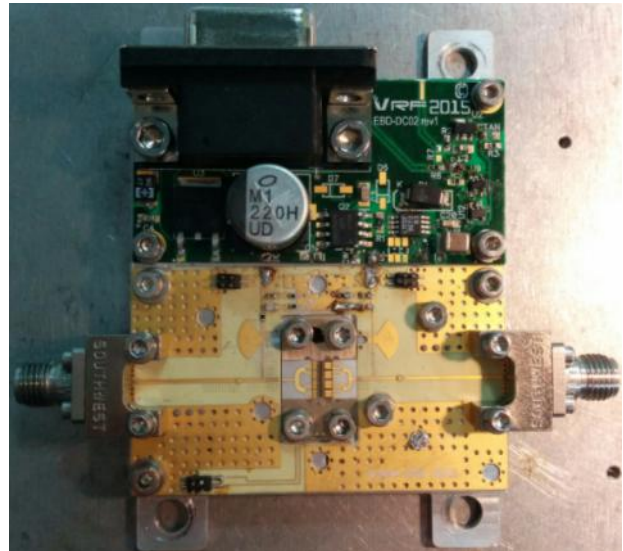


## 70 Watts X-Band GaN Amplifier Pallet

*Advance Product Information*

### Evaluation Board - VRFA0061-PLT-EB

- Aluminium Housing
- RF IN and RF OUT through field-replaceable Southwest Microwave end launchers
- Substrate material Rogers 4350B
- Integrated pulsing controller
- Power supply, Bias and Pulse through D-SUB 9 female
- Appropriate external heat sink is required
- Dimensions 72.3 x 50 x 7 mm (excluding RF connectors)
- Weight 86 grams



GaN devices are ESD sensitive and precautions should be observed during storage, handling, assembly and testing.

