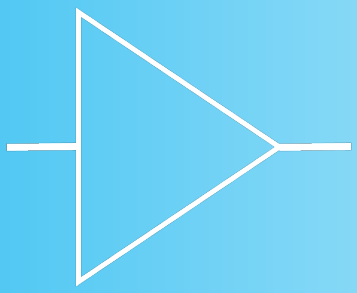
TSA-225014

High Power GaN Amplifier

2 to 6 GHz, 150 Watt
High Power GaN Amplifier



EXPORT RESTRICTIONS MAY APPLY

Description

The TSA-225014 amplifier provides nominal output power of 150 Watts.

Heat sinking is required to keep the case temperatures within a safe operating range. A thin layer of thermal grease or HiTherm (for example the HT-2500 series) helps provide a low resistance thermal path between the case and the mounting surface. The mounting surface should be metal with heat conduction of aluminum or better. Heat sink size depends on whether fan-driven air cooling is used, or if only convection is used.

HEAT SINK WARNING:

This amplifier requires an adequate heat sink to prevent damage. Maximum case temperature must not be exceeded. The package is designed to provide adequate heat transfer to proper aluminum heat sink.

Typical Values

- Broadband: 2-6GHz
- High Saturated Power, Psat: 150 W, (51.8dBm)
- Dimensions: 3.86”L x 4.60”W x 0.80”H

Specifications*

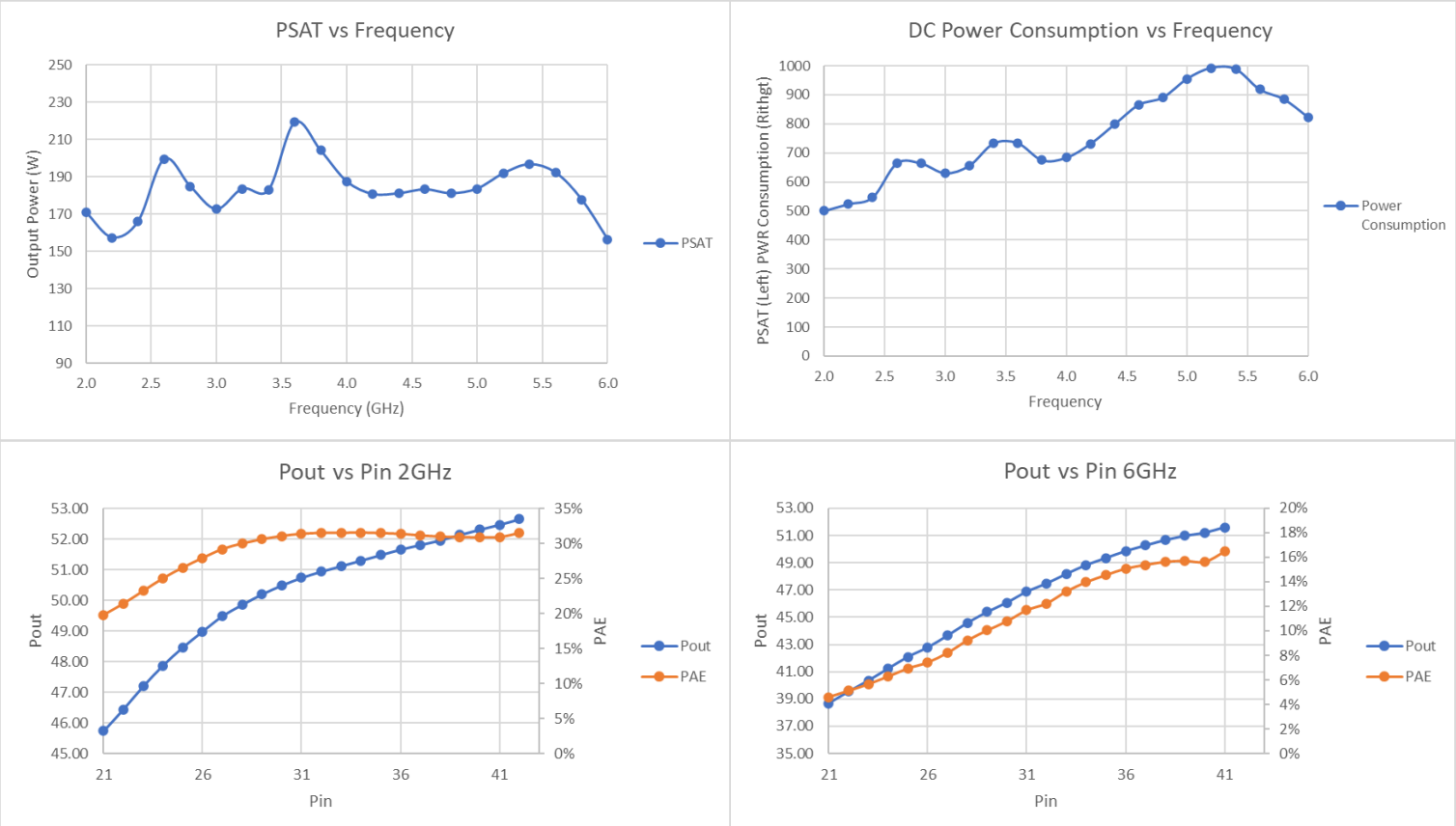
Parameter	Performance
Frequency (Min.)	2-6 GHz
Small Signal Gain (Min.)	21 dB
VSWR (Max.) Input/Output	1.25:1/1.5:1
Power Output (Min.) @ Pin = +43dBm	150W
DC Current (Max.) @ Pin = +43dBm	35.3A

* Measured in a 50-ohm system at +28V

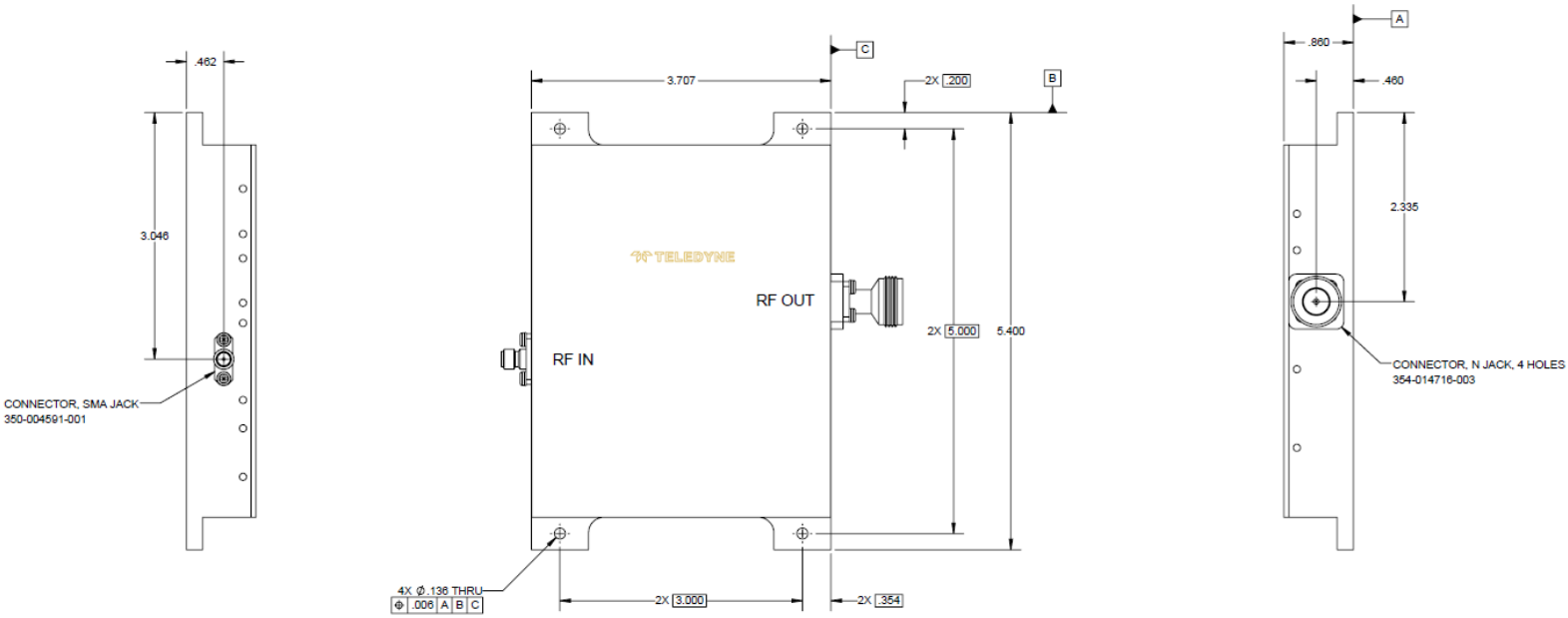
Absolute Maximum Ratings

Parameter	Value
Storage Temperature	-54 to +125°C
Maximum Case Temperature, +28V	+85°C
Maximum DC Voltage	+40 Volts
Maximum RF Input Power	+44 dBm

Graphical Performance



Outline Drawing – High Power GaN Amplifier



NOTES
1. DIMENSIONS ARE IN INCHES.
2. TOLERANCES: .XXX ± .005
   .XX ± .01
3. CASE MATERIAL: ALUMINUM ALLOY 6061