

### Main Features:

- Frequency Range: 13 to 16 GHz.
- Typical values: Psat 37 dBm, Gain 22 dB
- RF connectors (I/O): SMA Female
- Solder filtered pins for DC connection
- Several mounting options
- Gold plated compact aluminum housing
- Hi-reliability and dedicated screening/ environmental tests available under request

### ERZ-HPA-1300-1600-37

The ERZ-HPA-1300-1600-37 is a High Power Amplifier providing an output power of 37 dBm and a gain of 22 dB. The compact size and modularity makes it ideal for a wide range of applications.

### Typical applications:

- Industrial / Laboratory
- Satcom / Telecom
- Space / Aerospace / Military

### Performance

Parameter	Value			Units
	Min	Typ	Max	
Frequency	13	-	16	GHz
Output Power (Psat)	35	37	39	dBm
Small Signal Gain	20	22	24	dB
Gain Flatness	-	±1.5	-	dB
Noise Figure	-	-	-	dB
VSWR input	-	2.0:1	-	-
VSWR output	-	2.0:1	-	-
DC Voltage	9	12	15	V
Power Consumption	-	40	-	W
Connectors	SMA Female IN/OUT			-

Specifications at a case temperature of 25°C

### Saturated Output Power

Figure 1 shows saturated output power ( $P_{sat}$ ) measurement as a function of frequency at room temperature (25°C).

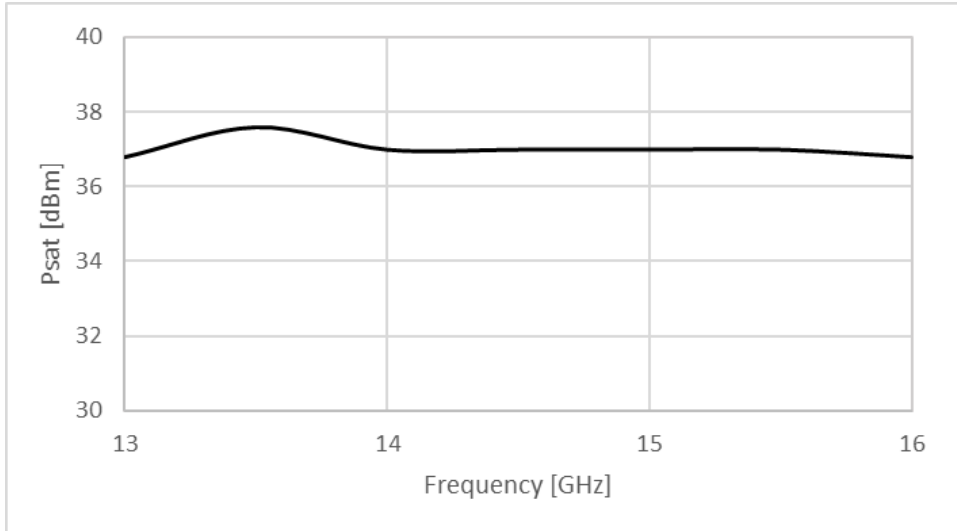


Figure 1: ERZ-HPA-1300-1600-37  $P_{sat}$

### Small Signal Gain

Figure 2 shows expected small signal gain measurement as a function of frequency at room temperature (25°C).

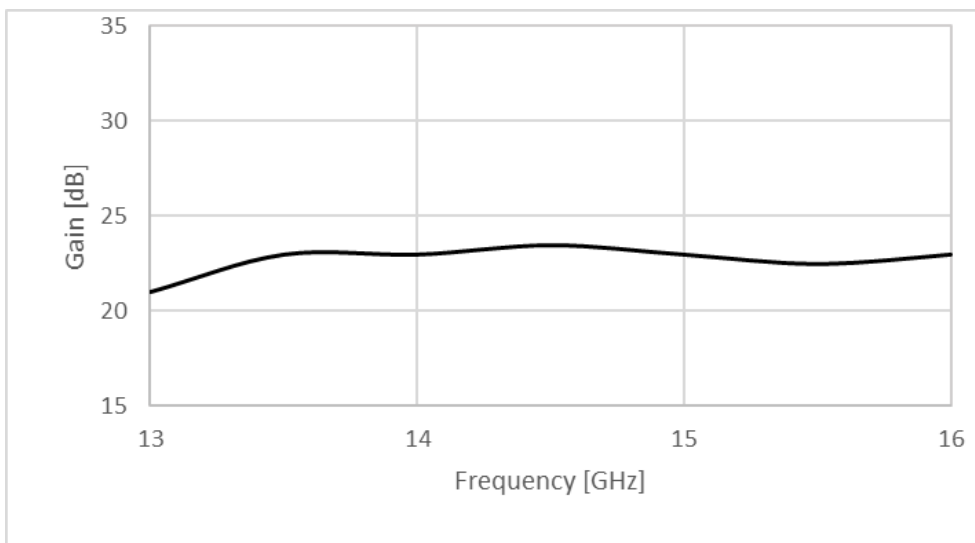


Figure 2: ERZ-HPA-1300-1600-37 Small Signal Gain

### Measurements Conditions

All measurements provided in this report were performed at the following conditions:

Condition	Value
Temperature	25°C ± 1°C
Humidity	70% ± 10%
DUT Warm up time	30 min
Test equipment warm up time	1 hour

### Absolute Maximum Ratings

Condition	Value
DC Voltage	+15 VDC
Maximum Input Power (CW)	21 dBm
Operation temperatura (at case)	-35°C to 70°C
Storage temperature	-55°C to 125°C

- Stress above these ratings may cause permanent damage to the device.
- It is final user responsibility to maintain the amplifier within the specified ranges.



## Documentation and Test Reports

All modules are at least delivered with: Electrical Test Report, Certificate of Conformance, Certificate of Acceptance and Origin. Optionally, units can be environmentally tested (temperature, vibration...).

## Option (HS): Heat Sink

A heat sink (HS) can be provided to allow the operation of Power Amplifiers. Please note that most power amplifiers need heat sink or appropriate heat dissipation strategy.

## Space / Military Usage

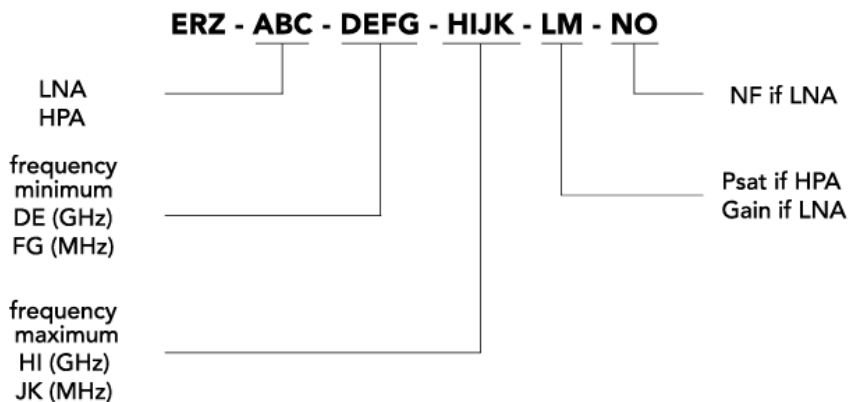
Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

## Customization and Extended Performances

ERZIA can fully design or adapt one of the existing RF amplifiers designs according to your specifications. Please contact us for additional information.

## Model Number Codification

### MODEL NUMBER



# ERZIA

20170224\_rev1.1

Copyright © 2016 Erzia Technologies. All rights reserved. This information is commercial and indicative, subject to change without notice

Tel: +34 942 29 13 42

[sales.rf@erzia.com](mailto:sales.rf@erzia.com)

[www.erzia.com](http://www.erzia.com)