



### Main Features:

- Frequency Range: 12 to 16 GHz.
- Typical values: Pout 26 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-1200-1600-26

The ERZ-HPA-1200-1600-26 is a High Power Amplifier providing an output power of 26 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	12	-	16	GHz
Output Power (Psat)	25	26	27	dBm
Small Signal Gain	20	22	24	dB
Gain Flatness	-	±1	-	dB
Noise Figure	7	7.5	8.5	dB
VSWR input	1.0:1	1.5:1	2.2:1	-
VSWR output	1.0:1	1.5:1	2.0:1	-
DC Voltage	9	12	15	V
Power Consumption	-	2.5	-	W
RF Connectors	SMA Female IN/OUT			-

Specifications at a case temperature of 25°C at 12 V

### Output Power

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

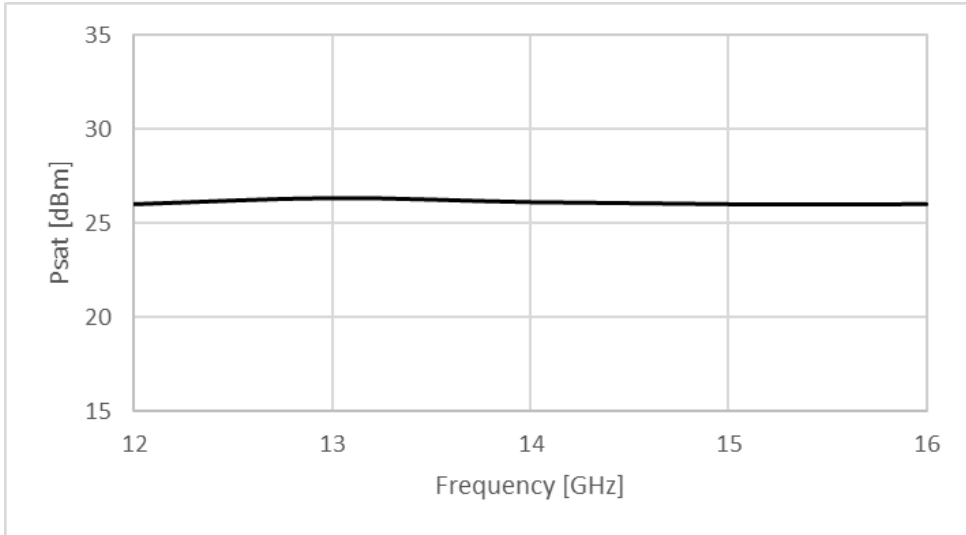


Figure 1: ERZ-HPA-1200-1600-26  $P_{sat}$

### Small Signal Gain

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

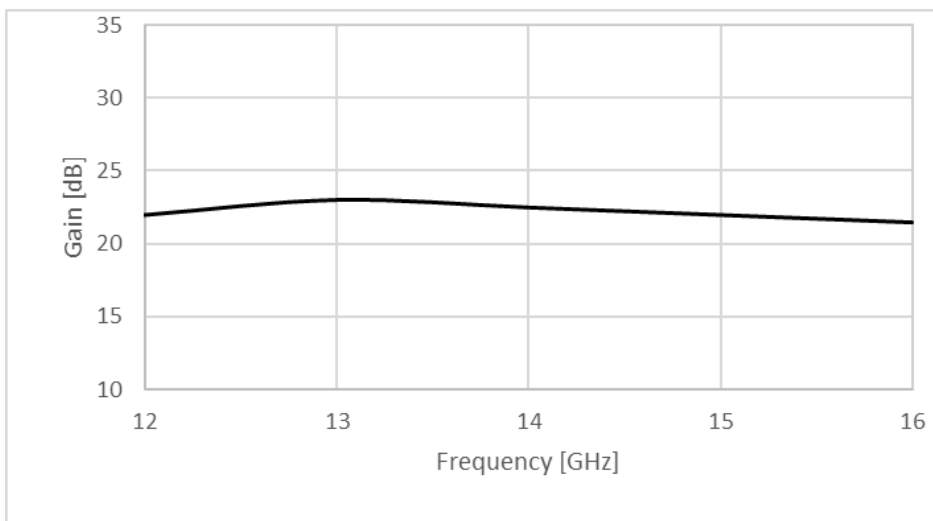


Figure 2: ERZ-HPA-1200-1600-26 Small Signal Gain

### Noise Figure

Figure 3 shows noise figure measurement as a function of frequency at room temperature (25°C).

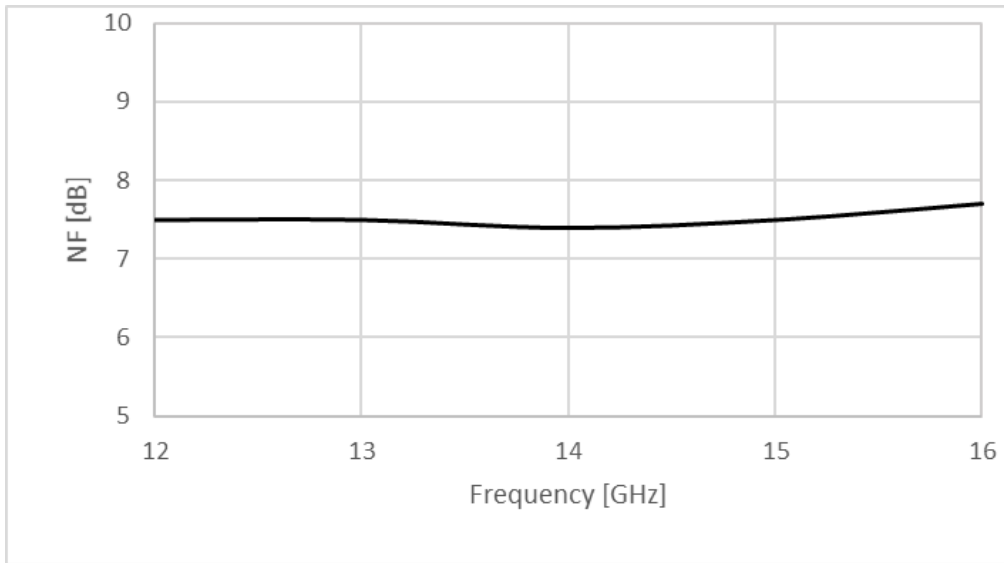


Figure 3: ERZ-HPA-1200-1600-26 Noise Figure

### Absolute Maximum Ratings

Condition	Value
DC Voltage	+15 VDC
Maximum Input Power (CW)	+19 dBm
Operation temperature (at case)	-45 to 85 °C
Storage temperature	-55 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.

### Measurements Conditions

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

Condition	Value
Temperature (DUT ON)	25 °C ± 1°C
Humidity	44% ± 10%
DUT Warm up time	30 min
DUT minimum operation time	24 hours
Test equipment warm up time	2 hours
Additional temperature cycles in climatic chamber (DUT OFF)	-40°C to 85°C

### Environmental Specifications (By Design)

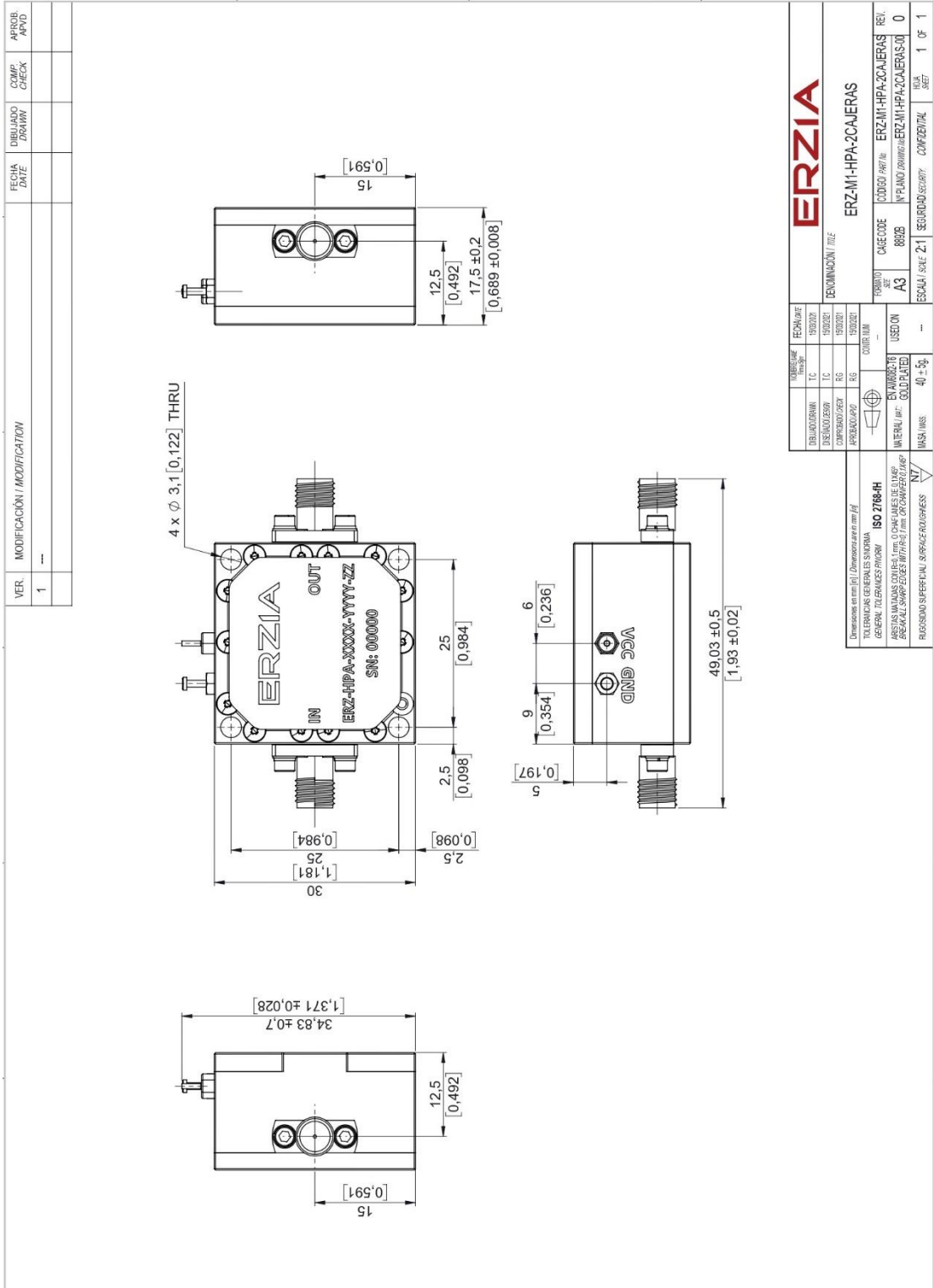
Operating Temperature:	-45 to +85 °C	(MIL-STD-810F, method 520.2)
Storage Temperature:	-55 to 125 °C	(MIL-STD-810F, method 520.2)
Vibration:	8g rms	(MIL-STD-810F, method 514.5)
Shock:	20g,11ms,saw-tooth	(MIL-STD-810F, method 516.5)
Acceleration:	15g	(MIL-STD-810F, method 513.5)

### RoHS & REACH Compliance

This part is compliant with EU 2011/65/UE RoHS (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment) and REACH (Registration, Evaluation, Authorization and restriction of Chemical substances) directives.



### Mechanics and Housing



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ERZ-M1-HPA-2CAJERAS																																			
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<p style="font-size: small;">Dimensiones en mm (In) / Dimensions in mm (In)</p> <p style="font-size: small;">TOLERANCIAS GENERALES SIEMPRE EN MILÍMETROS / TOLERANCES ALWAYS IN MILLIMETERS</p> <p style="font-size: small;">ISO 2768-H</p> <p style="font-size: small;">GENERAL TOLERANCES ALWAYS IN MILLIMETERS</p> <p style="font-size: small;">ARISTAS Y ANILLOS CONTRA TORNILLOS Y CARRUAJES DE 1.5MM / EDGES AND RINGS ALWAYS IN MILLIMETERS</p> <p style="font-size: small;">MATERIAL (MTC) / MATERIAL (MTC)</p> <p style="font-size: small;">EN ANILLOS / IN RINGS</p> <p style="font-size: small;">GOLD PLATED</p> <p style="font-size: small;">USO / USE</p> <p style="font-size: small;">40 ± 5%</p> <p style="font-size: small;">MASA (MS) / WEIGHT (WT)</p> <p style="font-size: small;">Nº / Nº</p> <p style="font-size: small;">REVISIONES SUPERFICIALES / SURFACE FINISH</p>																																			

### 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

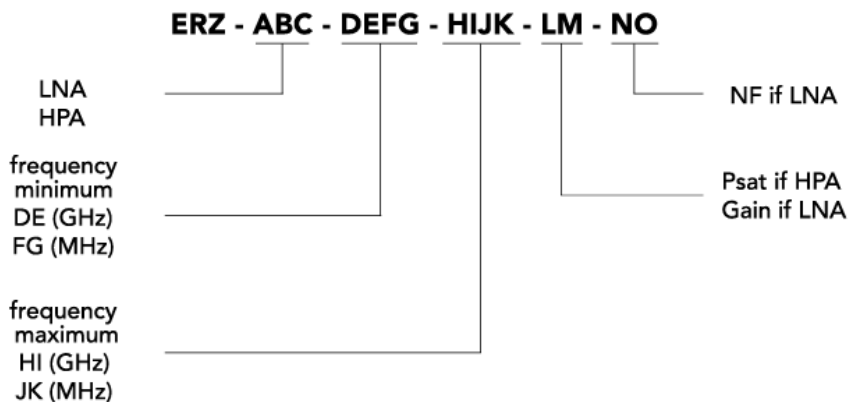
Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

### 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

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Tel: +34 942 29 13 42

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

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