

### Main Features:

- Frequency Range: 27 to 42 GHz.
- Typical values: Psat 27 dBm, Gain 35 dB
- RF connectors (I/O): 2.4 mm 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-2700-4200-27

The ERZ-HPA-2700-4200-27 is a High Power Amplifier providing an output power of 27 dBm and a gain of 35 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	27	-	42	GHz
Output Power (Psat)	26	27	28	dBm
Gain	32	35	38	dB
Noise Figure	-	-	-	dB
VSWR input	1.1:1	1.8:1	2.1:1	-
VSWR output	1.0:1	1.3:1	1.8:1	-
DC Voltage	8	12	16	V
Power Consumption	-	7	-	W
Connectors	2.4 mm Female IN/OUT			-

Specifications at case temperature of 25°C

### Saturated Output Power

Figure 1-1 shows saturated output power measurement as a function of frequency at room temperature (25°C).

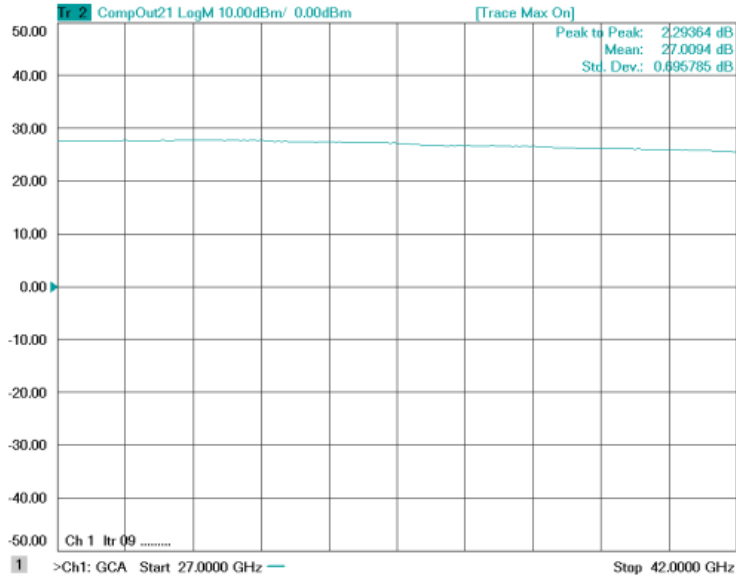


Figure 1-1: ERZ-HPA-2700-4200-27 Psat

### Small Signal Gain

Figure 1-2 shows small signal gain measurement as a function of frequency at room temperature (25°C).

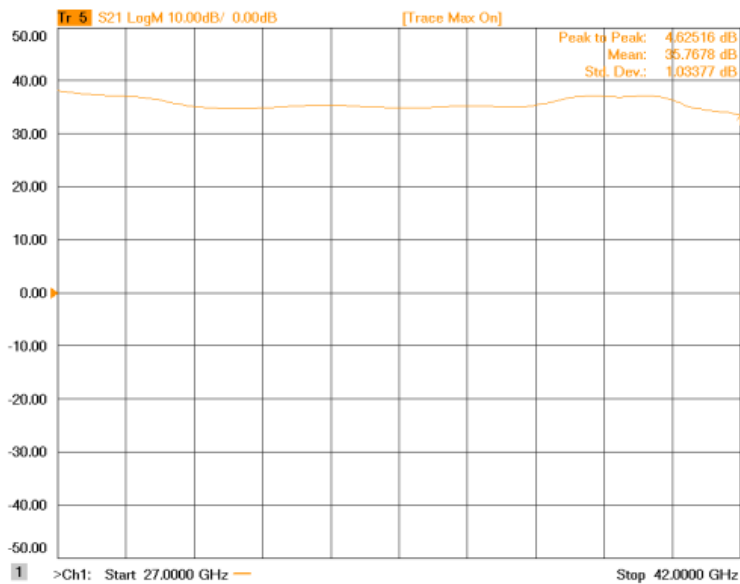


Figure 1-2: ERZ-HPA-2700-4200-27 Small Signal Gain

### Input and Output Matching

Figure 1-4 and Figure 1-5 show input (S11) and output (S22) VSWR as a function of frequency at room temperature (25°C).

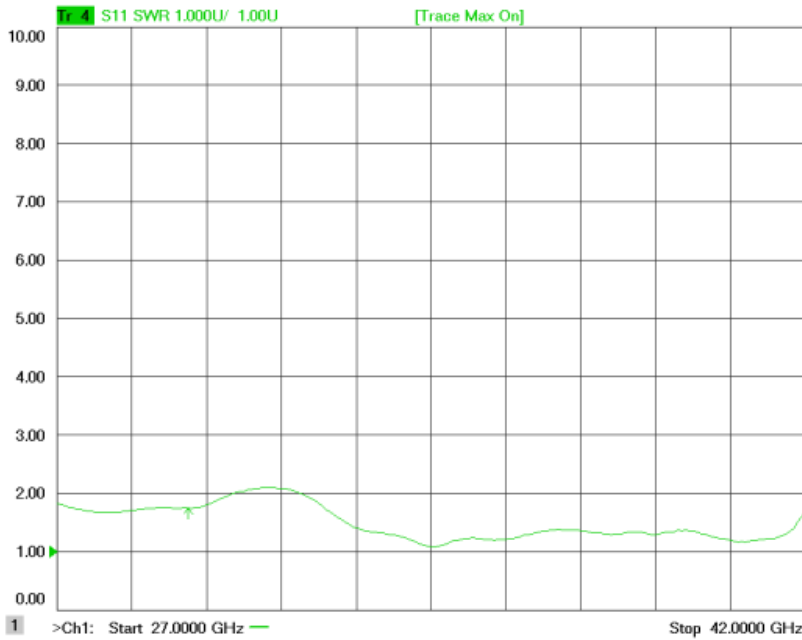


Figure 1-4: ERZ-HPA-2700-4200-27 Input Matching

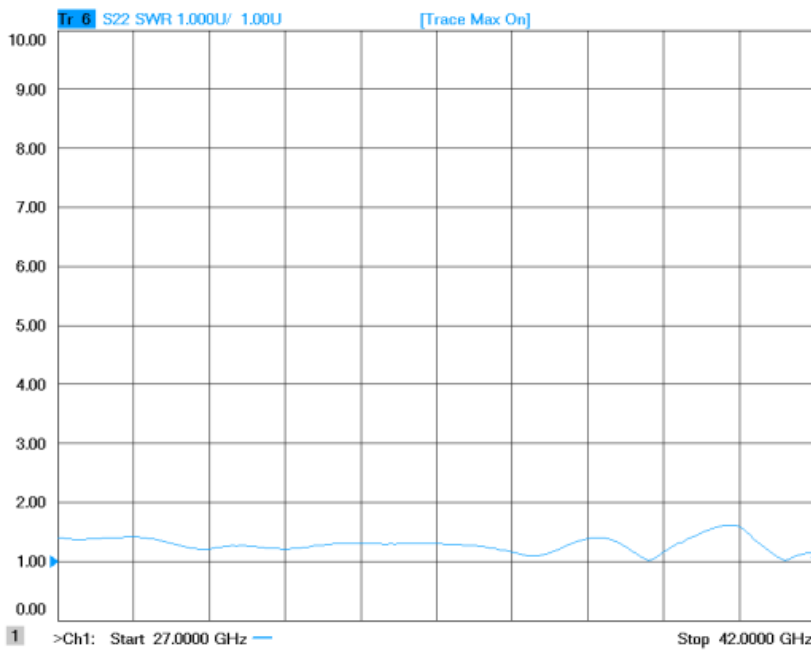


Figure 1-5: ERZ-HPA-2700-4200-27 Output Matching

### Measurements Conditions

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

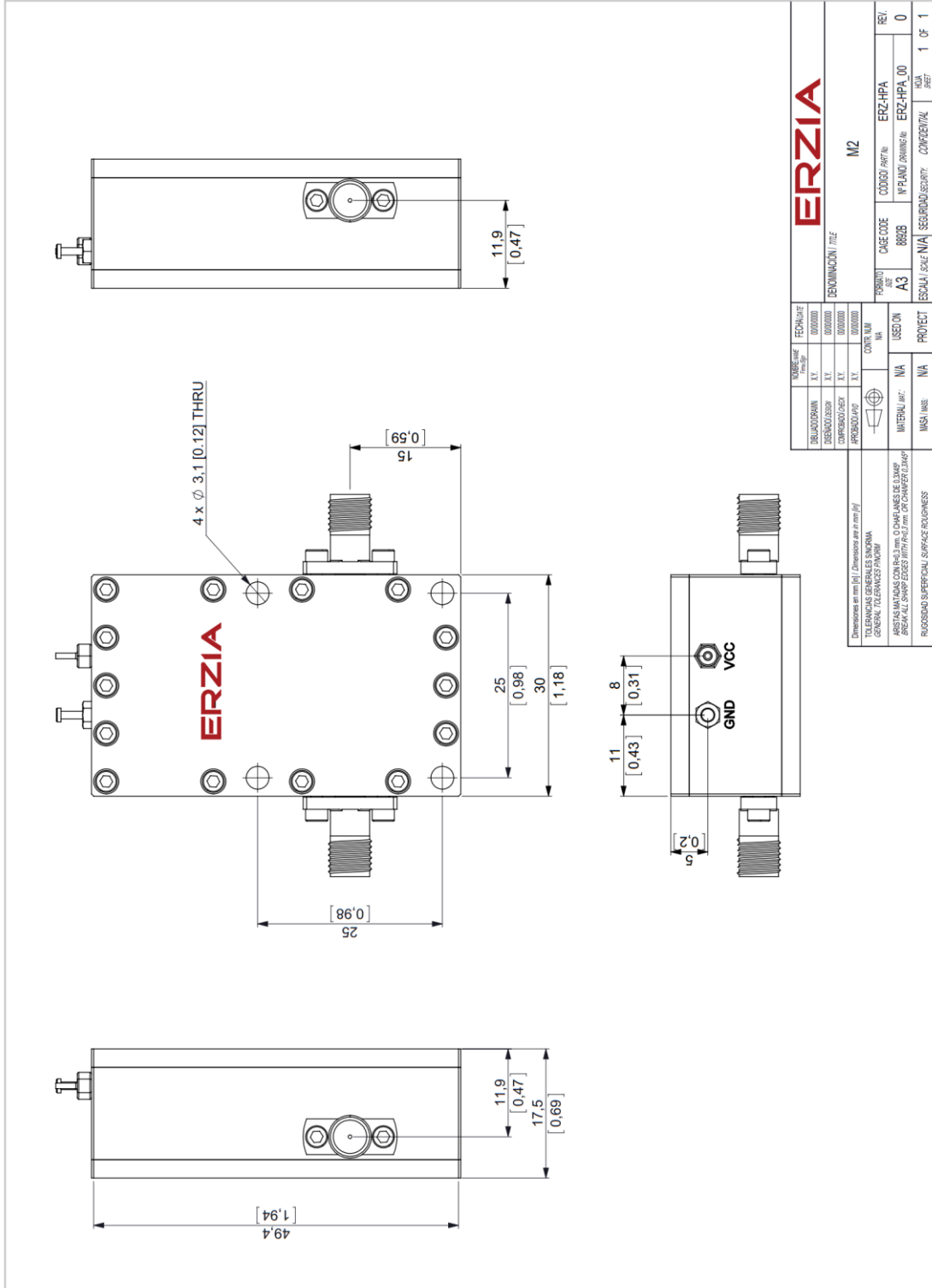
Condition	Value
Temperature	25°C ± 1°C
Humidity	70% ± 10%
DUT Warm up time	30 min
Test equipment warm up time	1 hour

### Absolute Maximum Ratings

Condition	Value
DC Voltage	+16 VDC
Maximum Input Power (CW)	10 dBm
Operation temperatura (at case)	-35°C to 70°C
Storage temperature	-45°C to 85°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.

## Mechanics and Housing



MATERIE PLACATE		FECHA DE FUNDICIÓN	<b>ERZIA</b>		
DESGARRE	XT	01/01/00	DENOMINACIÓN / TITULO		
DESARROLLO	XT	01/01/00	M2		
PROYECTO	XT	01/01/00	FORMA	CÓDIGO PART.	REV.
PROYECTO	XT	01/01/00	A3	88028	0
MATERIAL / MAT.		USED ON	Nº PLANO ORIGINAL		ERZ-HPA 00
MATERIA / MAT.		PROYECT	DESCRIPCIÓN		COMPENITAL
MATERIA / MAT.		PROYECT	DESCRIPCIÓN		1 OF 1

Dimensiones en mm ["] - Dimensiones en mm ["]  
 1. DIMENSIONES EN mm ["]  
 2. DIMENSIONES EN mm ["]  
 3. DIMENSIONES EN mm ["]  
 4. DIMENSIONES EN mm ["]  
 5. DIMENSIONES EN mm ["]  
 6. DIMENSIONES EN mm ["]  
 7. DIMENSIONES EN mm ["]  
 8. DIMENSIONES EN mm ["]  
 9. DIMENSIONES EN mm ["]  
 10. DIMENSIONES EN mm ["]  
 11. DIMENSIONES EN mm ["]  
 12. DIMENSIONES EN mm ["]  
 13. DIMENSIONES EN mm ["]  
 14. DIMENSIONES EN mm ["]  
 15. DIMENSIONES EN mm ["]  
 16. DIMENSIONES EN mm ["]  
 17. DIMENSIONES EN mm ["]  
 18. DIMENSIONES EN mm ["]  
 19. DIMENSIONES EN mm ["]  
 20. DIMENSIONES EN mm ["]  
 21. DIMENSIONES EN mm ["]  
 22. DIMENSIONES EN mm ["]  
 23. DIMENSIONES EN mm ["]  
 24. DIMENSIONES EN mm ["]  
 25. DIMENSIONES EN mm ["]  
 26. DIMENSIONES EN mm ["]  
 27. DIMENSIONES EN mm ["]  
 28. DIMENSIONES EN mm ["]  
 29. DIMENSIONES EN mm ["]  
 30. DIMENSIONES EN mm ["]  
 31. DIMENSIONES EN mm ["]  
 32. DIMENSIONES EN mm ["]  
 33. DIMENSIONES EN mm ["]  
 34. DIMENSIONES EN mm ["]  
 35. DIMENSIONES EN mm ["]  
 36. DIMENSIONES EN mm ["]  
 37. DIMENSIONES EN mm ["]  
 38. DIMENSIONES EN mm ["]  
 39. DIMENSIONES EN mm ["]  
 40. DIMENSIONES EN mm ["]  
 41. DIMENSIONES EN mm ["]  
 42. DIMENSIONES EN mm ["]  
 43. DIMENSIONES EN mm ["]  
 44. DIMENSIONES EN mm ["]  
 45. DIMENSIONES EN mm ["]  
 46. DIMENSIONES EN mm ["]  
 47. DIMENSIONES EN mm ["]  
 48. DIMENSIONES EN mm ["]  
 49. DIMENSIONES EN mm ["]  
 50. DIMENSIONES EN mm ["]

### 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

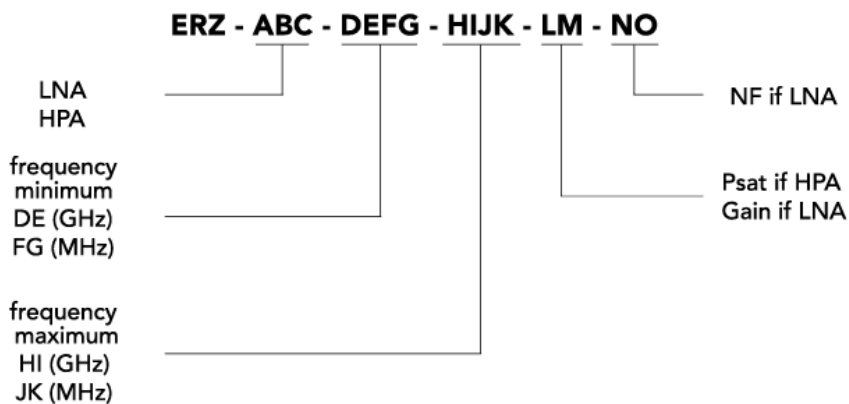
Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

### 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

20150407\_rev1.0

Copyright © 2015 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)