

Low Noise Amplifier ERZ-LNA-0700-1400-16-2



ERZ-LNA-0700-1400-16-2

The ERZ-LNA-0700-1400-16-2 is a Low Noise Amplifier providing a gain of 19 dB with a noise figure below 2 dB. The compact size and modularity makes it ideal for a wide range of applications.

Main Features:

- Frequency Range: 7 to 14 GHz.
- Typical values: Gain 19 dB, NF 2 dB
- RF connectors (I/O): SMA
- Solder filtered pins for DC connection
- Several mounting options
- Gold platted compact aluminum housing
- Hi-reliability and dedicated screening/ environmental tests available under request

Typical applications:

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

Parameter	Value			Units
	Min	Тур	Max	
Frequency	7	-	14	GHz
Output Power (P1dB)	12.5	13	13.1	dBm
Gain	19	19.5	20	dB
Noise Figure	1.8	1.9	2.0	dB
VSWR input	-	2.0:1	2.5:1	-
VSWR output	-	1.5:1	2.0:1	-
DC Voltage	5	6	7	V
Power Consumption	-	0.4	-	W
Connectors	SMAFemale IN/OUT			-

Typical performances

Specifications at a case temperature of 25°C



Small Signal Gain

Figure 1 shows the small signal gain measurement as a function of frequency at room temperature $(25^{\circ}C)$.

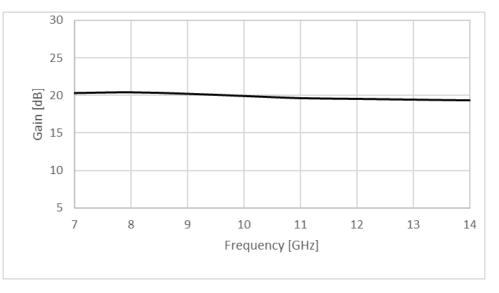


Figure 1: ERZ-LNA-0700-1400-16-2 Small Signal Gain

Noise Figure

Figure 2 shows the noise figure measurement as a function of frequency at room temperature (25°C).

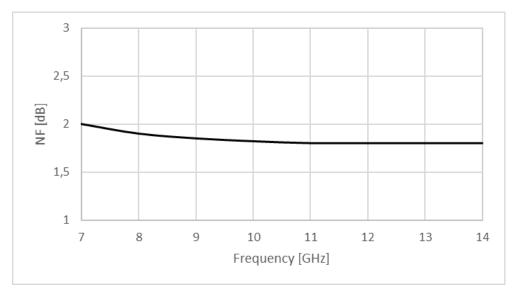


Figure 2: ERZ-LNA-0700-1400-16-2 Noise Figure

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Absolute Maximum Ratings

Condition	Value	
DC Voltage	+7 VDC	
Maximum Input Power (CW)	10 dBm	
Operation temperatura (at case)	-35°C to 70°C	
Storage temperature	-45°C to 85°C	

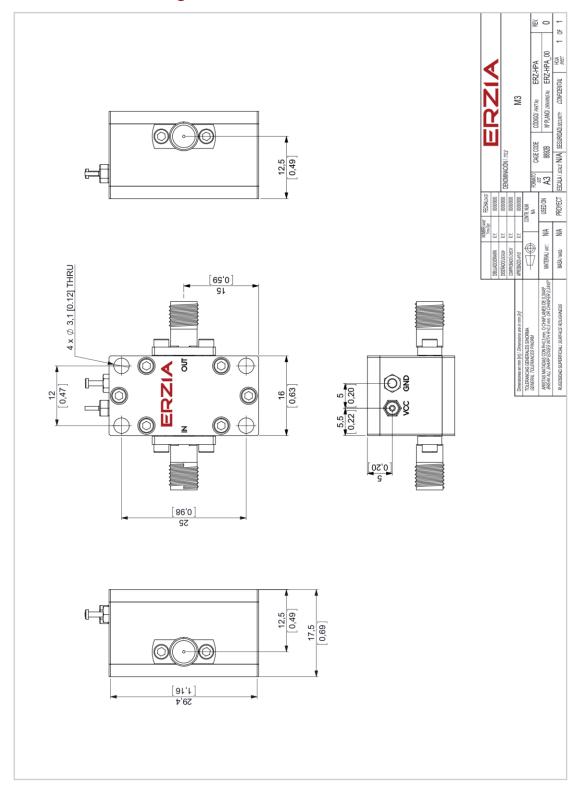
- Stress above these ratings may cause permanent damage to the device.
- It is final user responsibility to maintain the amplifier within the specified ranges.



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Mechanics and Housing



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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.

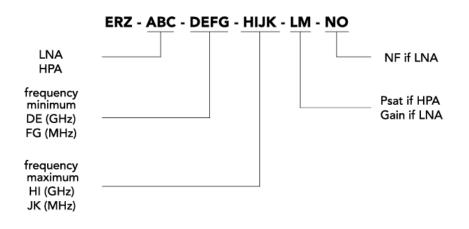
Space / Military Usage

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

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ERZIA

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