



Main Features:

- Single Down-converter.
- Input Frequency: 37.5 to 42.5 GHz.
- BW: 500 MHz
- Output Frequency: 1.25 to 1.75 GHz.
- Noise Figure: <3.5 dB.
- Gain: >50 dB.
- External LO.
- Hi-reliability and dedicated screening against MIL STDs.

Typical Applications:

- Satcom
- Aerospace.

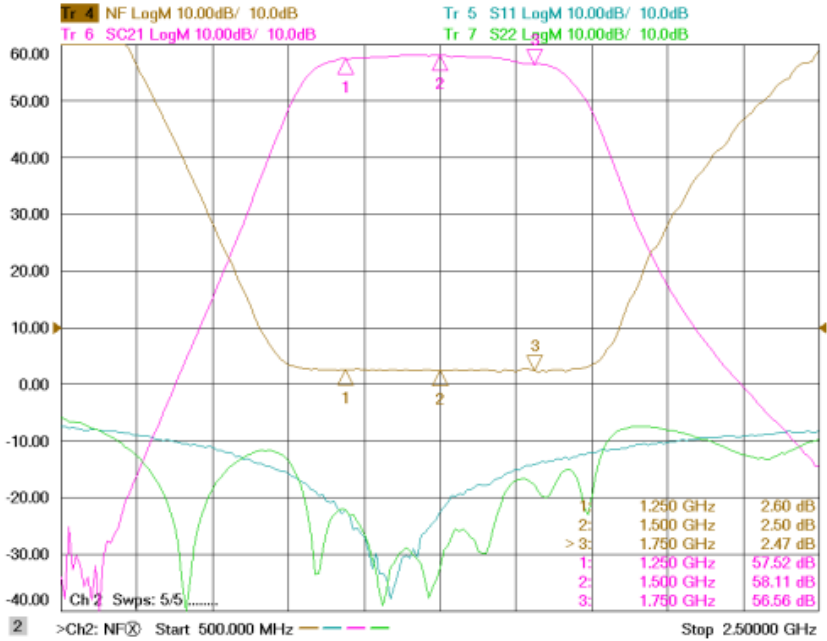
Electrical Specifications

Parameter	Value			Units
	Min	Typ	Max	
Input Frequency Range	37.5	-	42.5	GHz
Bandwidth	-	500	-	MHz
Output Frequency Range	1.25	-	1.75	GHz
Input Power	-130	-	-	dBm
External LO Frequency range	36.25	36.5	41.25	GHz
LO Input Level	+8	+12	+16	dBm
Small Signal Gain	50	55	-	dB
Noise Figure	-	2.5	3.5	dB
Input VSWR	-	1.8:1	2.5:1	-
Output VSWR	-	1.4:1	2.0:1	-
Input Voltage	-	15	-	V
Power Consumption	-	1	-	W
RF Connectors	WR-22/ SMA Female IN/OUT			-

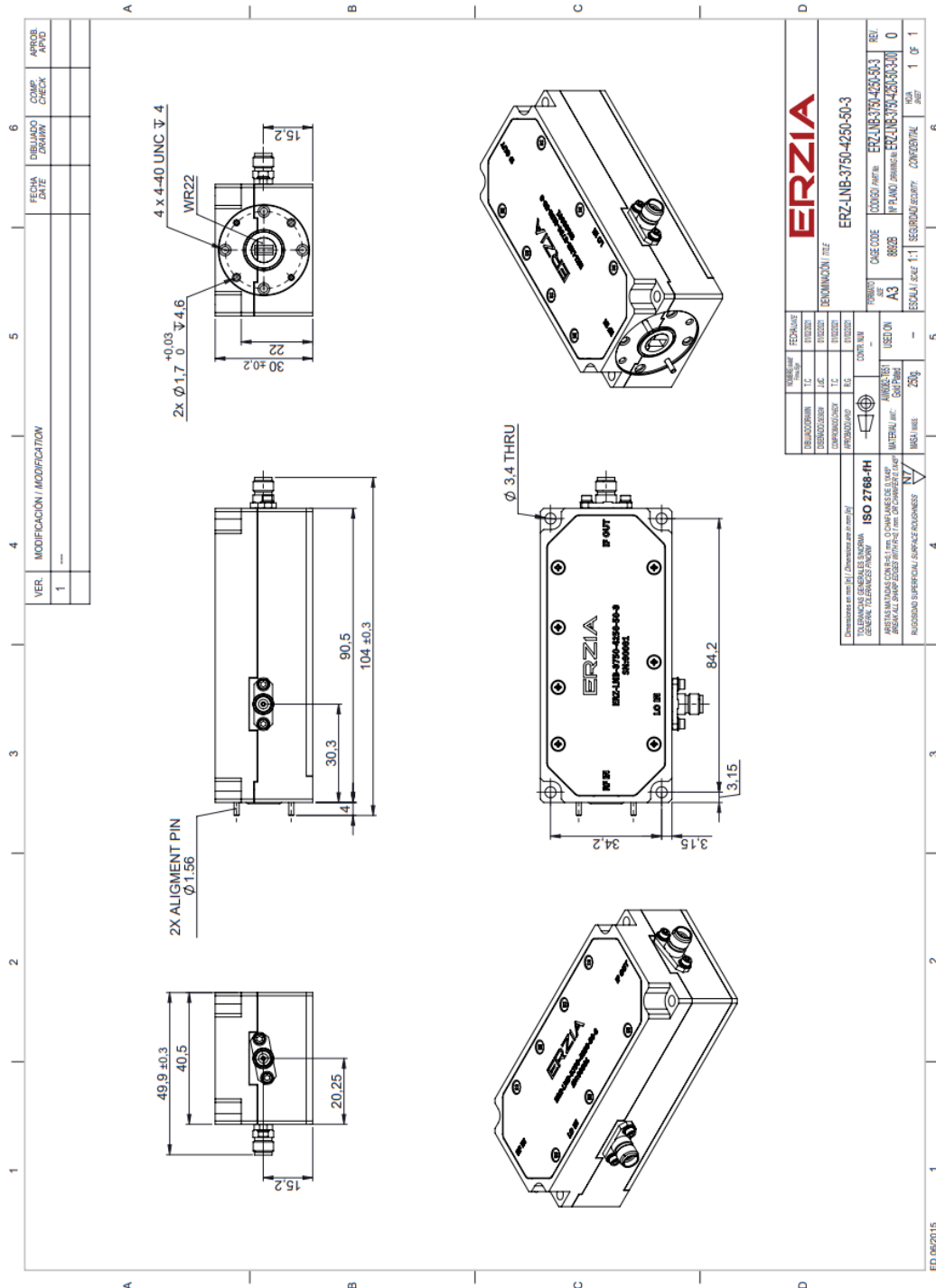
Specifications at a case temperature of 25°C

S-Parameters and Noise Figure

The following plot shows small signal gain, noise figure and input and output matching, as a function of frequency at room temperature (25°C).



Mechanics and Housing:



Absolute Maximum Ratings

Condition	Value
DC Voltage	+18 VDC
Maximum Input Power (CW)	0 dBm
Operation temperature (at case)	-40 to 70 °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.

Environmental Specifications (By Design)

Operating Temperature:	-40 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.



ERZIA

20210201_rev1.0

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