



### Main Features:

- Type: High Pass Filter (HPF)
- Technology: Suspended Substrate Stripline
- Frequency range: 17.5 to 41 GHz
- Insertion Loss: 2 dB
- RF connectors (I/O): 2.92 mm Female
- Compact aluminum housing
- Hi-reliability and dedicated screening/ environmental tests available under request

### ERZ-HPF-1750-4100-2

The ERZ-HPF-1750-4100-2 is a Suspended Substrate Stripline High Pass filter integrated in a compact, rugged and connectorized module allowing easy integration in a wide range of final applications.

### Typical applications:

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

### Performance

Parameter	Value			Units
	Min	Typ	Max	
Frequency (passband)	17.5	-	41	GHz
Insertion Loss	-	1.3	2	dB
Return Loss	10.2	13	-	dB
Frequency for 30 dB out of band rejection	16.05	-	-	GHz
Frequency for 60 dB out of band rejection	15.4	-	-	GHz
CW Power Handling	-	-	10	W
RF Connectors	2.92 mm Female IN/OUT			-

### Insertion loss & Return loss

Figure 1 shows insertion loss and return loss measurements as a function of frequency at room temperature (25°C).

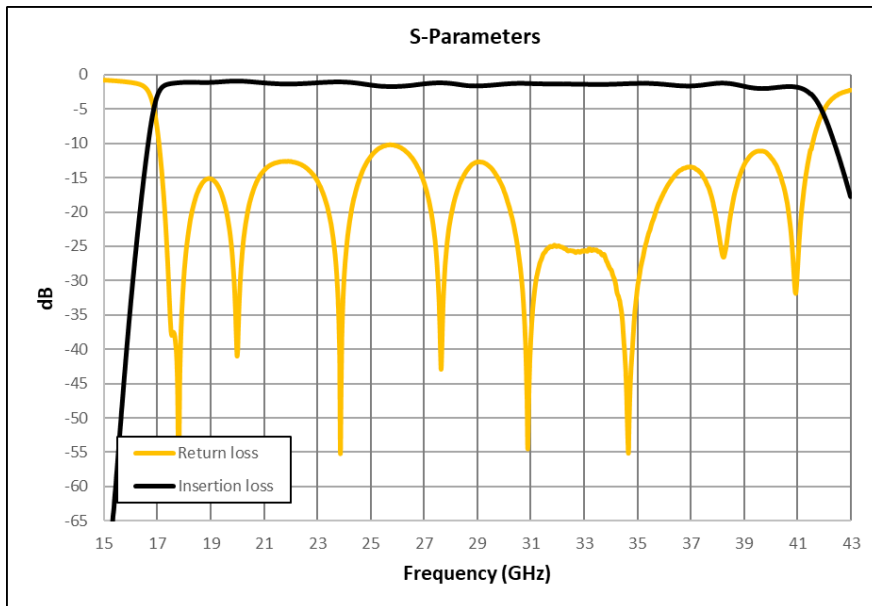


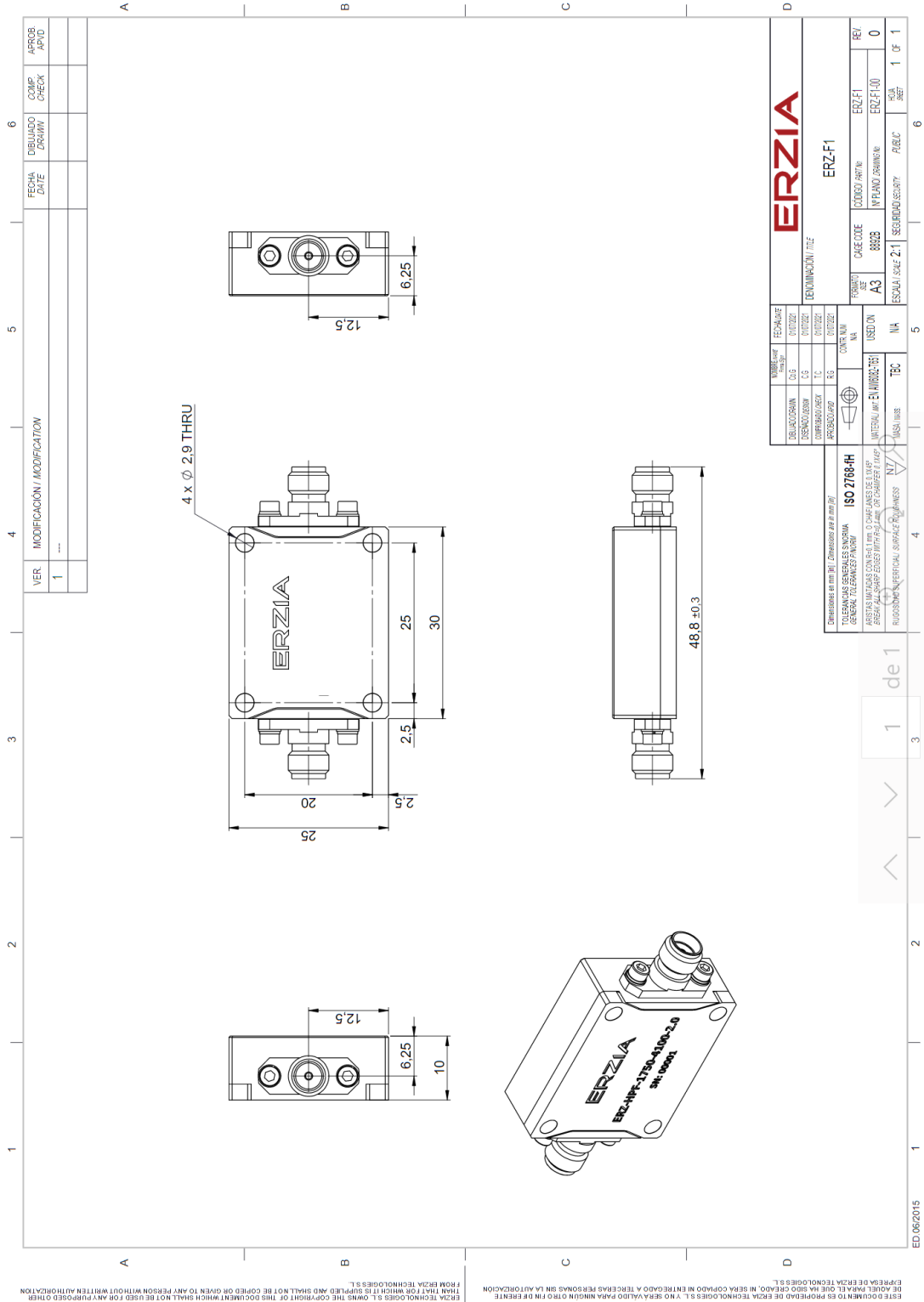
Figure 1: ERZ-HPF-1750-4100-2 Insertion & Return loss

### Absolute Maximum Ratings

Condition	Value
Maximum Input Power (CW)	40 dBm
Operation temperature (at case)	-40 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 filter within the specified ranges.

### Mechanics and Housing



### 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.



### 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...).

### Space / Military Usage

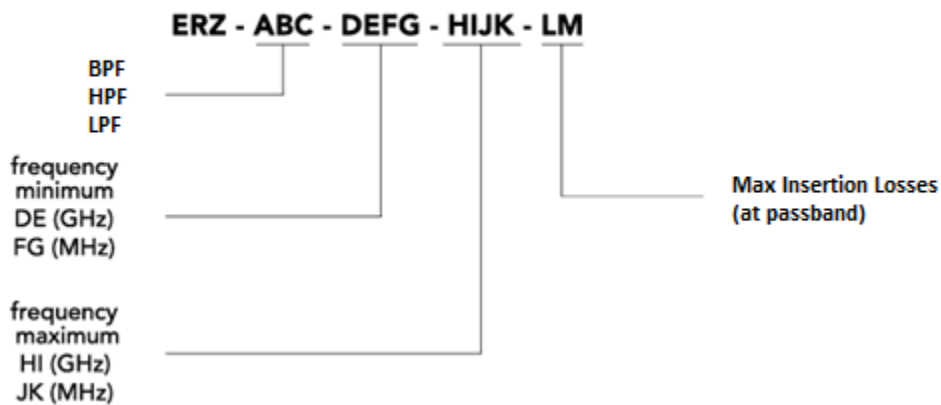
Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

### Customization and Extended Performances

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

### Model Number Codification

#### MODEL NUMBER



# ERZIA

20210705\_rev1.0

Copyright ©2021 ERZIA Technologies. All rights reserved. This information is commercial and indicative, subject to change without notice

Tel: +34 942 29 13 42

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

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