

High Pass Filter ERZ-HPF-0540-1210-1.4



ERZ-HPF-0540-1210-1.4

The ERZ-HPF-0540-1210-1.4 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.

Main Features:

- Type: High Pass Filter (HPF)
- Technology: Suspended Substrate Stripline
- Frequency range: 5.4 to 12.1 GHz
- Insertion Loss: 1.4 dB
- RF connectors (I/O): SMA Female
- 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 (passband) | 5.4 | - | 12.1 | GHz |
| Insertion Loss | - | 0.8 | 1.4 | dB |
| Return Loss | 9 | 15 | - | dB |
| Frequency for 30 dB out of band rejection | 5.1 | - | - | GHz |
| Frequency for 60 dB out of band rejection | 5 | - | - | GHz |
| CW Power Handling | - | - | 10 | W |
| RF Connectors | SMA Female IN/OUT | | | - |

Performance



Insertion loss & Return loss

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

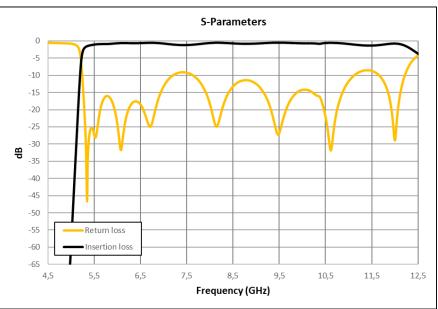


Figure 1:ERZ-HPF-0540-1210-1.4 Insertion & Return loss

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 | |

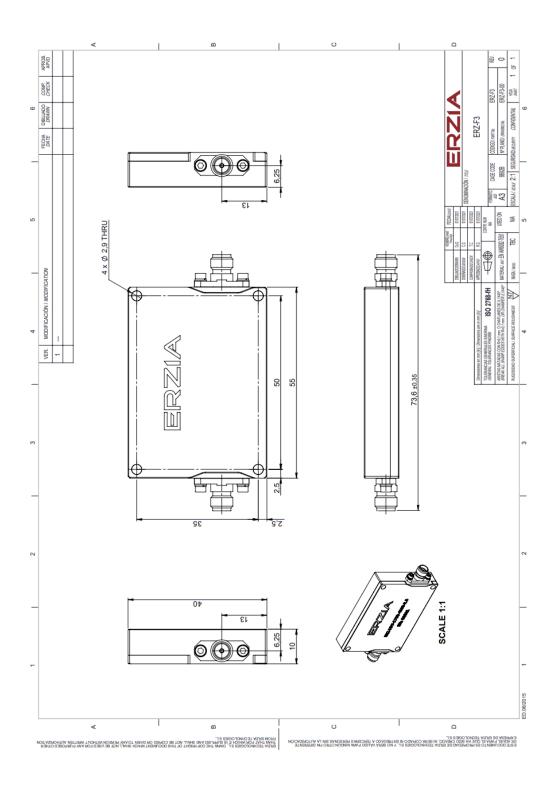
- Stress above these ratings may cause permanent damage to the device.
- It is final user responsibility to maintain the filter within the specified ranges.



High Pass Filter

ERZ-HPF-0540-1210-1.4

Mechanics and Housing



www.erzia.com

sales@erzia.com



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: |
|------------------------|
| Storage Temperature: |
| Vibration: |
| Shock: |
| Acceleration: |

-45 to +85 °C -55 to 125 °C 8g rms 20g,11ms,saw-tooth 15g (MIL-STD-810F, method 520.2) (MIL-STD-810F, method 520.2) (MIL-STD-810F, method 514.5) (MIL-STD-810F, method 516.5) (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.



sales@erzia.com



High Pass Filter ERZ-HPF-0540-1210-1.4

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

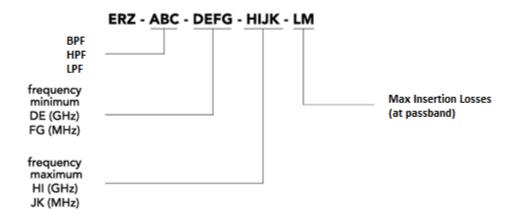
Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

Customization and Extended Performances

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

Model Number Codification

MODEL NUMBER



Tel: +34 942 29 13 42

sales@erzia.com

www.erzia.com

ERZIA

20210809_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

