

# Band Pass Filter ERZ-BPF-0350-0380-2.4



#### ERZ-BPF-0350-0380-2.4

The ERZ-BPF-0350-0380-2.4 is a suspended substrate band pass filter integrated in a compact, rugged and connectorized module allowing easy integration in a wide range of final applications.

#### Main Features:

- Type: Band Pass Filter (BPF)
- Technology: Suspended Substrate
- Frequency range: 3.5 to 3.8 GHz
- Insertion Loss: 2.2 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)	3.5	-	3.8	GHz
Insertion Loss	-	2.2	2.5	dB
Return Loss	17	18	-	dB
Frequency for 30 dB out of band rejection	3.1	-	4.1	GHz
Frequency for 60 dB out of band rejection	2.9	-	4.3	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).

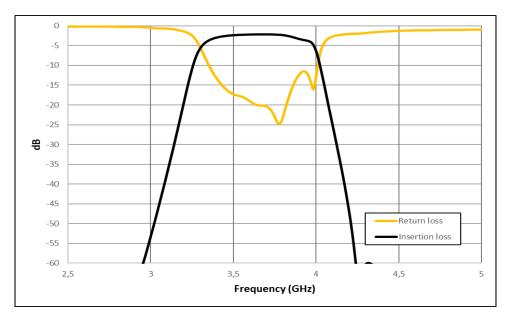


Figure 1: ERZ-BPF-0350-0380-2.4 Insertion & Return loss

#### 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	

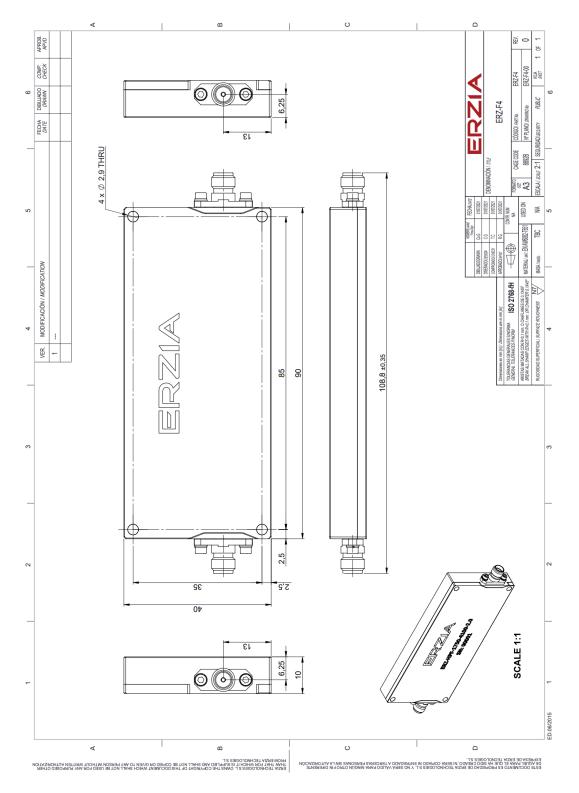
- Stress above these ratings may cause permanent damage to the device.
- It is final user responsibility to maintain the filter within the specified ranges.



# **Band Pass Filter**

ERZ-BPF-0350-0380-2.4

## Mechanics and Housing



Tel: +34 942 29 13 42

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



# Band Pass Filter ERZ-BPF-0350-0380-2.4

#### 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

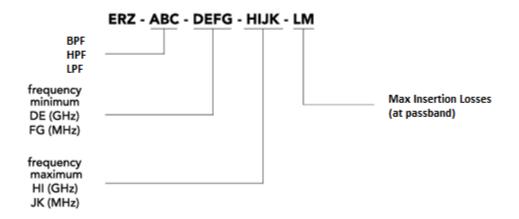
Most of ERZIA's products are based on rad-hard technologies and can be manufactured and integrated according to MIL / ECSS or specific hi-rel standard-screening for space, aeronautics, military or specific hi-reliability usage.

#### **Customization and Extended Performances**

ERZIA can fully design or adapt one of the existing RF filters 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

20210625\_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

