



Mini-Circuits

LTCC COAXIAL

Bandpass Filter

ZBFHK-K1272+

50Ω 11.9 to 12.8 GHz 2.92mm Female

KEY FEATURES

- Low Insertion Loss, 3.8 dB Typ.
- Return Loss, 10 dB Typ.
- Stopband Rejection, 90 dB Typ.
- Broadband Connectorized Package
- Power Handling: 1 Watts

APPLICATIONS

- Ku Band Satellite

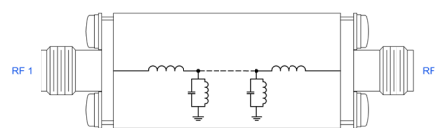
PRODUCT OVERVIEW

ZBFHK-K1272+ is a 50Ω band pass filter built in broad band connectorized package. Covering 11.9-12.8 GHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZBFHK-K1272+ offer low insertion loss, and excellent power handling capability. It handles up to 1 W RF input power and provides a wide operating temperature range from -55°C to 125°C.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS¹ AT +25°C

Parameter		F#	Frequency (GHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency ²	—	—	—	12.3	—	GHz
	Insertion Loss	F1-F2	11.9 - 12.8	—	3.8	5.0	dB
	Return Loss	F1-F2	11.9 - 12.8	—	10	—	dB
Stopband, Lower	Rejection	DC-F3	0.1 - 8.6	70	80	—	dB
Stopband, Upper	Rejection	F4-F5	16.7 - 18	70	90	—	dB
		F5-F6	18 - 31	70	80	—	
		F6-F7	31 - 38	55	70	—	

1. This component should not be used as a DC-block. In applications where DC voltage and/or current is present at either the input or output ports, external DC blocking capacitors are required.

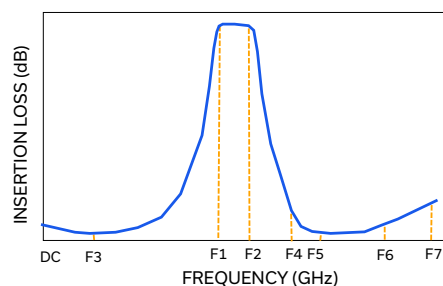
2. Typical variation ± 5%

ABSOLUTE MAXIMUM RATINGS³

Parameter	Ratings
Operating Temperature	-55°C to +125°C
Storage Temperature	-55°C to +125°C
Input Power	1 W

3. Permanent damage may occur if any of these limits are exceeded.

TYPICAL FREQUENCY RESPONSE



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REV. OR
ECO-029018
EDU4810
ZBFHK-K1272+
MCINU
260326

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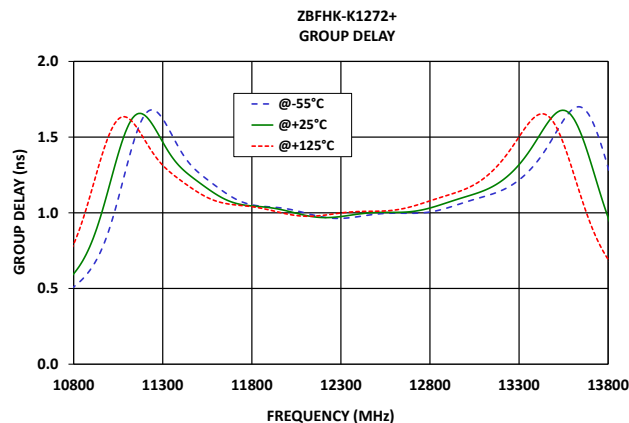
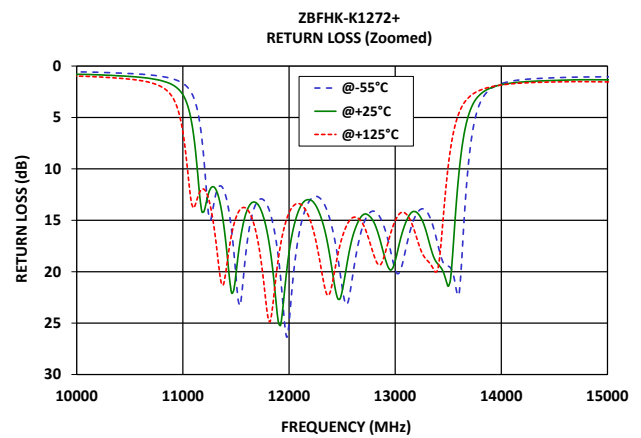
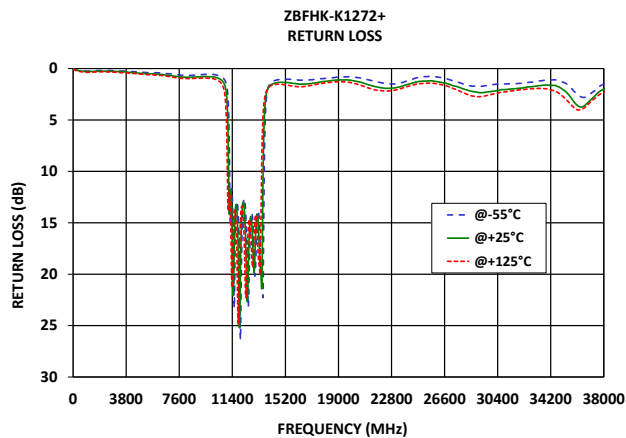
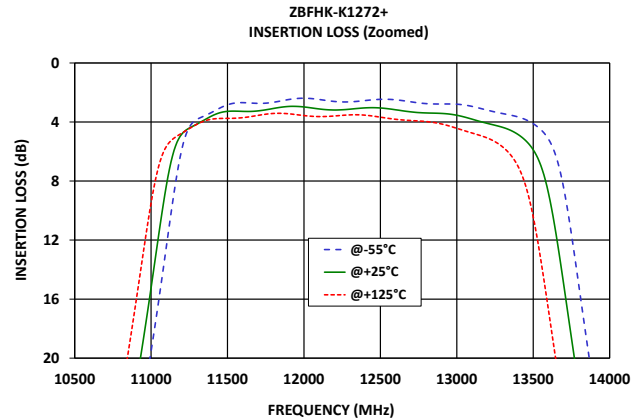
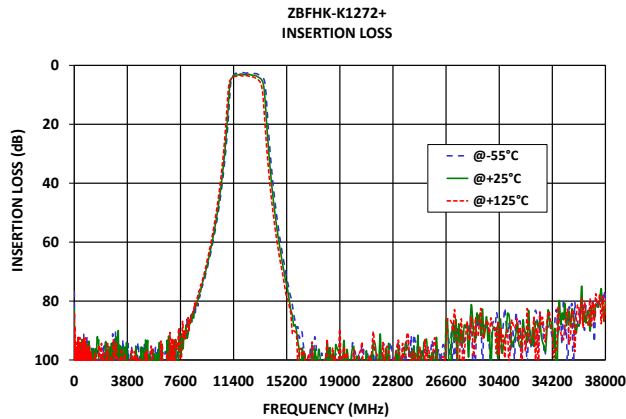
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TYPICAL PERFORMANCE GRAPHS





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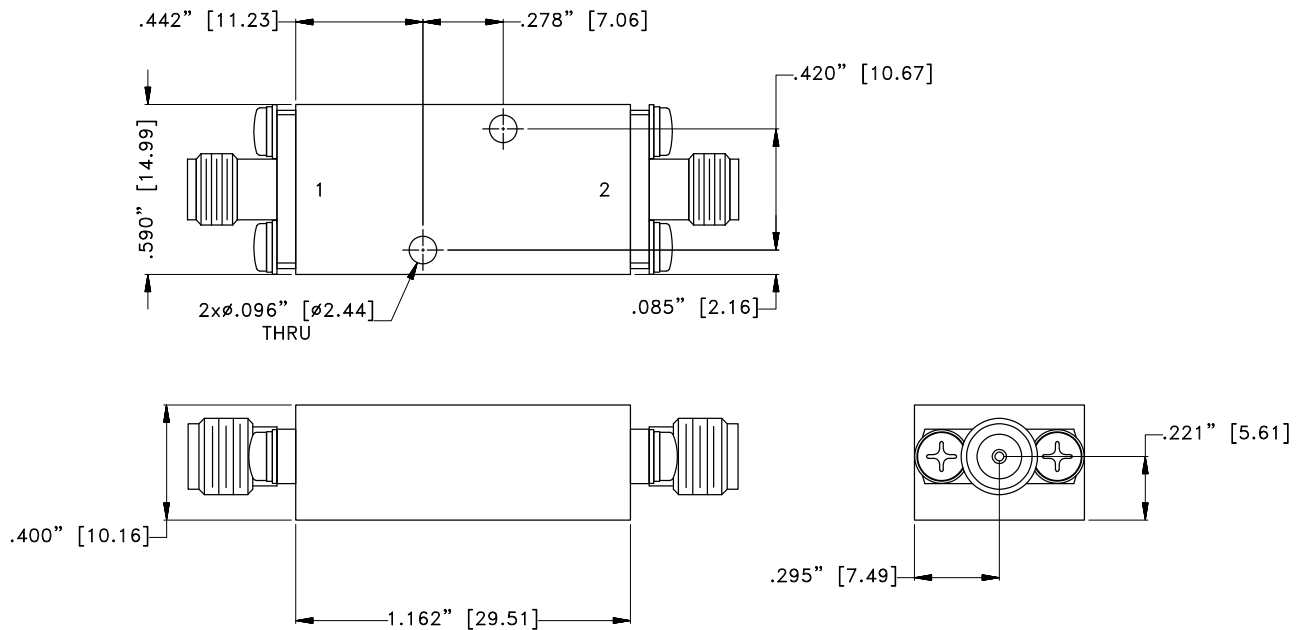
50Ω 11.9 to 12.8 GHz 2.92mm Female

CONNECTOR DESCRIPTION

Function	Connector
RF1 ⁴	2.92mm Female
RF2 ⁴	2.92mm Female

4. This filter is bi-directional, RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

CASE STYLE DRAWING



Weight: 37 grams

Dimensions are in inches (mm). Tolerances: 2Pl ± .030 [.76]; 3Pl ± .015 [.38]

PRODUCT MARKING*: ZBFHK-K1272+

*Marking may contain other features or characters for internal lot control.



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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	BBW3851
RoHS Status	Compliant
Environmental Ratings	ENV124

NOTES

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- C. The parts covered by this specification document are subject to Mini-Circuits' standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the standard terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/terms/viewterm.html

