



(LTCC) COAXIAL

Low Pass Filter

ZLFW-K1292+

50Ω DC to 12.9 GHz 2.92mm Female

KEY FEATURES

- Low Insertion Loss, 1.3 dB Typ.
- Return Loss, 15 dB Typ.
- Stop Band Rejection, 45 dB Typ.
- Broadband Connectorized Package.
- Power Handling: 2.5 Watts

APPLICATIONS

- Test & Measurement.
- EW,Radar and ECM Defence Systems.
- Back Haul Radio Systems.

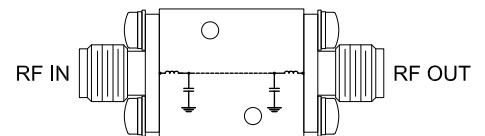


Generic photo used for illustration purposes only

PRODUCT OVERVIEW

ZLFW-K1292+ is a 50Ω low pass filter built in broadband connectorized package. Covering DC-12.9 GHz bandwidth, these units offer good matching within the passband and good rejection in stopband. ZLFW-K1292 + offer low insertion loss, and good power handling capability. It handles up to 2.5 W RF input power and provides a wide operating temperature range from -55°C to 125°C.

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS^{1,2} AT +25°C

Parameter	F#	Frequency (GHz)	Min.	Typ.	Max.	Units	
Pass Band	Insertion Loss	DC-F1	DC - 11.5	—	1.3	2.4	dB
		F1-F2	11.5 - 12.9	—	2.3	—	
	Freq. Cut-Off ³	F _c ³	13.9	—	3	—	dB
	Return Loss	DC-F1	DC - 12.9	—	13	—	dB
Stop Band	Rejection	F3-F4	17 - 19.5	20	38	—	dB
		F4-F5	19.5 - 22.9	25	32	—	
		F5-F6	22.9 - 25	20	30	—	
		F6-F7	25 - 26.5	—	25	—	

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

2. 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.

3. Typical variation ± 5%

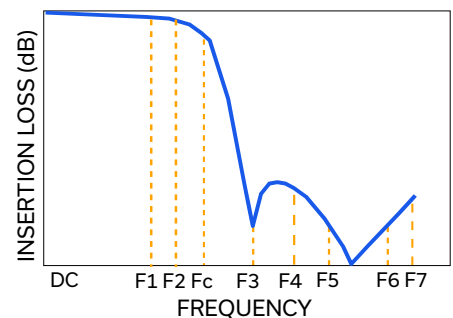
ABSOLUTE MAXIMUM RATINGS⁴

Parameter	Ratings
Operating Temperature	-55 °C to +125 °C
Storage Temperature	-55 °C to +125 °C
Input Power ⁵	2.5 W @25°C

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

5. Power rating applies only to signals within the passband. Power rating above +25°C operating temperature decreases linearly to 0.7 W at +125°C.

TYPICAL FREQUENCY RESPONSE





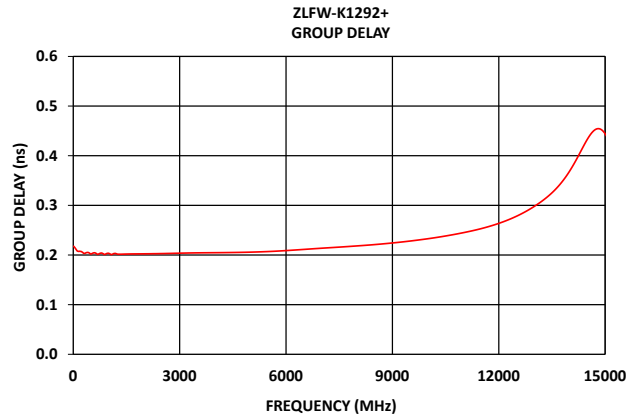
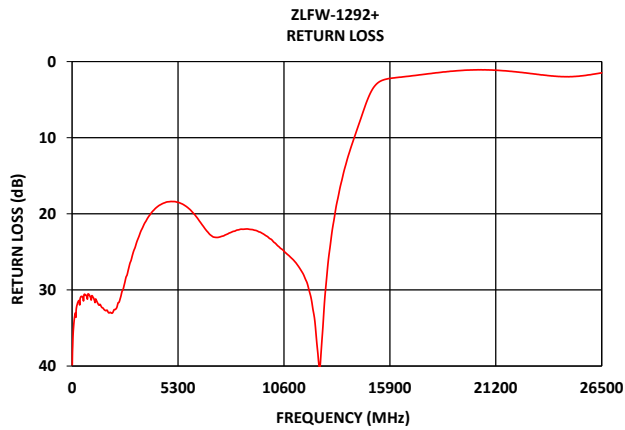
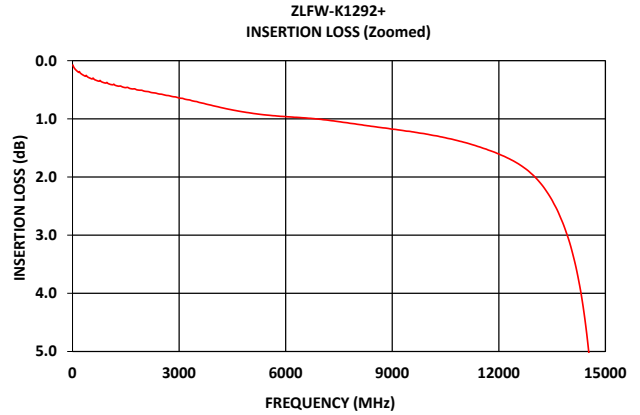
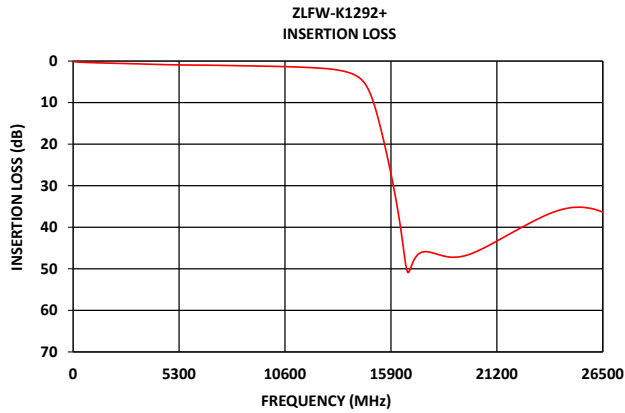
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TYPICAL PERFORMANCE GRAPHS





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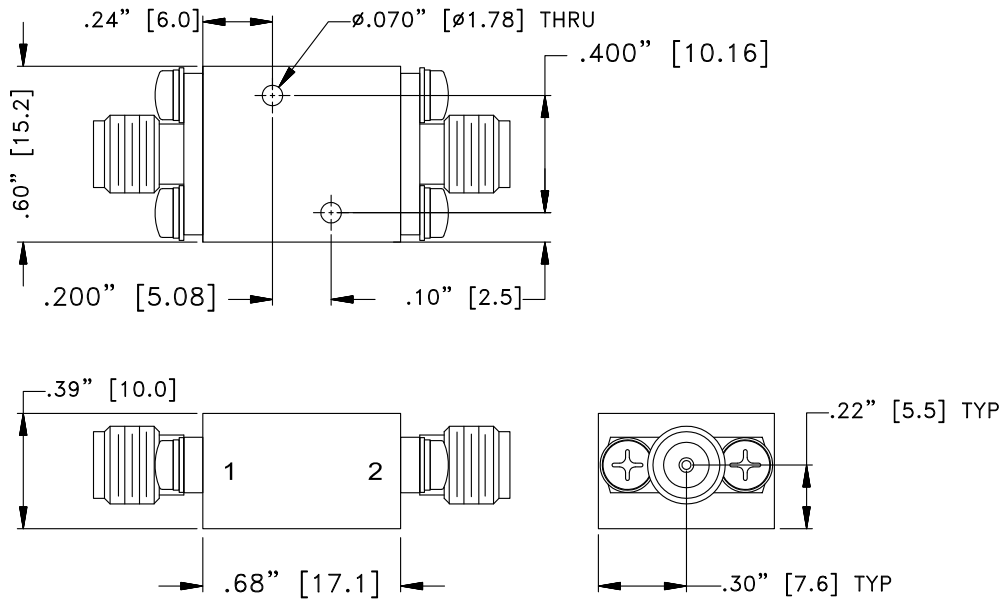
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CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1 ¹	1	2.92mm Female
RF2 ¹	2	2.92mm Female

CASE STYLE DRAWING



Unit weight: 24grams

Dimensions are in inches (mm). Tolerances: 2 Pl.±.050"; 3 Pl.±.015"

PRODUCT MARKING*: ZLFW-K1292+

*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	UK3042
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

