Coaxial

Low Pass Filter

ZFLP-450+

50Ω DC to 450 MHz

CASE STYLE: H16

The Big Deal

- Wide stopband Rejection
- Good VSWR, 1.2:1 typical in passband
- High Rejection

Product Overview

ZFLP-450+ is a 50Ω lowpass filter built into a rugged connectorized package (size :1.25" x 1.25" x 0.75") case. The model has high rejection, wide stopband rejection with well matched input and output ports. This is designed to handle high power (1W)

Key Features

Feature	Advantages
Wide stopband (More than 1 decade of cutoff frequency)	Suitable for application which needs far-frequency attenuation, for e.g. Defense Communications.
Good VSWR, 1.2:1 typical in passband	The model has good matching when used with other devices.
High Rejection	This enables the filter to attenuate harmonics and spurious signals.

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Connectors	Model	Price	Qty.
SMA-Female	ZFLP-450-S+	$49.95 ea.	(1-9)
BRACKET (OPTION "B")		$5.00 ea.	(1-9)

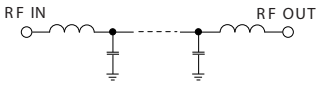
Features

- High Rejection
- Wide stopband rejection
- Good VSWR,1.2:1 typical in passband
- Rugged connectorized package

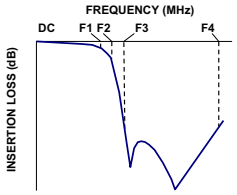
Applications

- Harmonic rejection
- Defense Communications
- Receivers / Transmitters
- Lab Use

Functional Schematic



Typical Frequency Response



+ RoHS compliant in accordance with EU Directive (2002/95/EC)

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

Electrical Specifications at 25°C

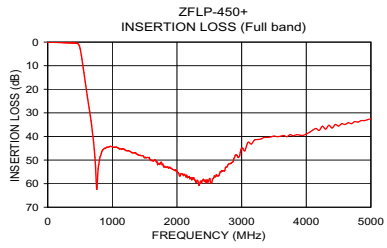
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-450	—	0.5	1.0	dB
	Freq. Cut-Off	F2	505	—	4.0	—	dB
	VSWR	DC-F1	DC-450	—	1.2	1.5	:1
Stop Band	Rejection Loss	F3-F4	640-5000	20	26	—	dB
	VSWR	F3-F4	640-5000	—	21	—	:1

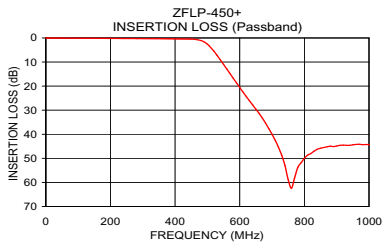
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1W max. at 25°C

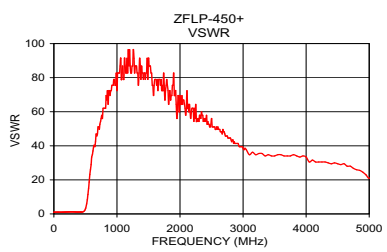
Permanent damage may occur if any of these limits are exceeded.

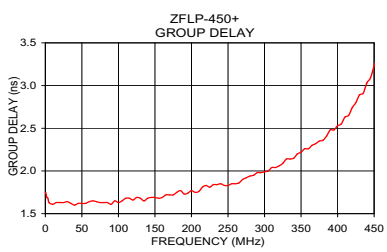
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
0.5	0.02	1.00	0.5	1.75
3.5	0.02	1.01	5.0	1.63
20.0	0.05	1.02	165.0	1.72
50.0	0.08	1.03	195.0	1.74
80.0	0.10	1.03	240.0	1.85
205.0	0.22	1.14	280.0	1.94
405.0	0.39	1.11	290.0	1.98
450.0	0.48	1.10	305.0	2.00
480.0	0.88	1.65	325.0	2.09
500.0	2.10	2.91	335.0	2.14
505.0	2.60	3.45	360.0	2.26
530.0	6.44	8.35	375.0	2.35
570.0	14.03	23.18	385.0	2.41
640.0	27.28	40.41	390.0	2.48
730.0	48.04	52.65	400.0	2.53
1000.0	44.04	72.39	405.0	2.55
1500.0	48.71	91.43	415.0	2.65
2000.0	52.62	69.49	425.0	2.80
3000.0	43.66	38.61	440.0	3.03
5000.0	30.58	20.95	450.0	3.23









For detailed performance specs & shopping online see web site

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IF/RF MICROWAVE COMPONENTS

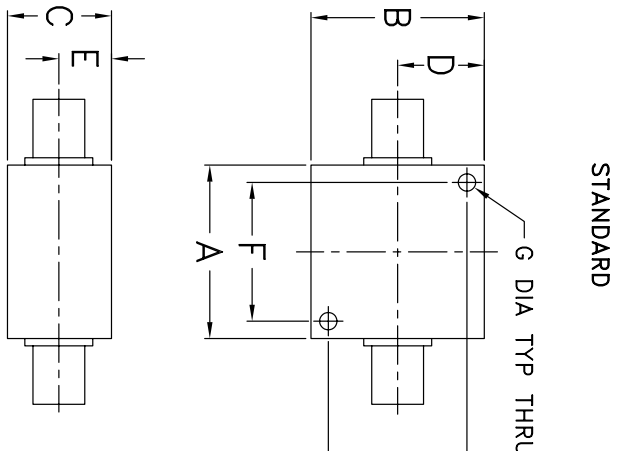
Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. **2.** Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. **3.** The parts covered by this specification sheet 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/MCLStore/terms.jsp.

REV. OR
M130754
ZFLP-450+
EDR-9824BU
RAV/URJ/NY
111123

Coaxial Connections

INPUT	SMA-FEMALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40

J	K	L	M	N	P	Q	wt
--	--	.125	1.688	2.18	.750	.06	grams
--	--	3.18	42.88	55.37	19.05	1.52	70.0