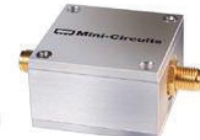


# Coaxial Low Pass Filter

## ZFLP-450-S+

50Ω DC to 450 MHz



Generic photo used for illustration purposes only  
CASE STYLE: H16

### The Big Deal

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

### Product Overview

ZFLP-450-S+ 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.

#### Notes

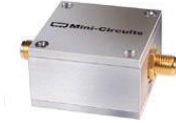
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# Low Pass Filter

## ZFLP-450-S+

50Ω DC to 450 MHz



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CASE STYLE: H16

Connectors Model

SMA-FEMALE ZFLP-450-S+

BRACKET (OPTION "B")

### 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

### 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

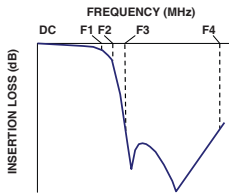
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1W max. at 25°C

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

### Functional Schematic



### Typical Frequency Response

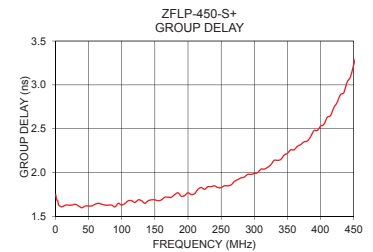
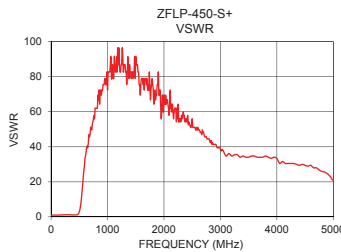
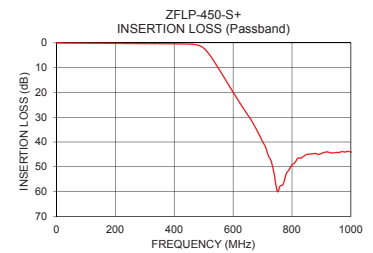
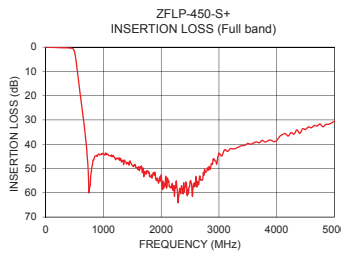


### Typical Performance Data at 25°C

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

### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



### Notes

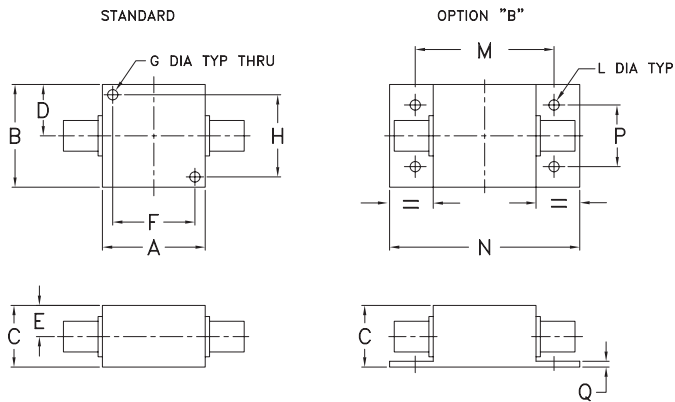
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## Coaxial Connections

PORT - 1	SMA-FEMALE
PORT - 2	SMA-FEMALE

## Outline Drawing



## Outline Dimensions ( $\frac{\text{inch}}$ / $\frac{\text{mm}}$ )

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

*Note: Please refer to case style drawing for details*

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