

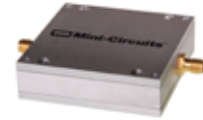
# Coaxial Low Pass Filter

## ZNFLP-2100+

50Ω DC to 1800 MHz

### The Big Deal

- High stopband rejection
- Low insertion loss in the passband, 0.6 dB typical.
- Good VSWR, 1.2:1 typical in passband



CASE STYLE: UU1432

### Product Overview

ZNFLP-2100+ is a 50Ω low pass filter built into a rugged connectorized package (size: 2.25" x 2.30" x 0.63"). This model has low passband insertion loss, high rejection with well matched input and output ports. In addition it has repeatable performance across production lots.

### Key Features

Feature	Advantages
Low passband insertion loss	It provides minimal attenuation to the signal.
High rejection	This enables diplexer to attenuate harmonics, and spurious signals.
Good VSWR, 1.2:1 typical in pass band	The model has good matching when used with other devices.

#### 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-Circuit's 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



# Low Pass Filter

# ZNFLP-2100+

50Ω DC to 1800 MHz



CASE STYLE: UU1432

Connectors	Model	Price	Qty.
SMA-FEMALE	ZNFLP-2100-S+	\$64.95 ea.	(1-9)

## Features

- High rejection
- Good VSWR, 1.2:1 typical in passband
- Connectorized package

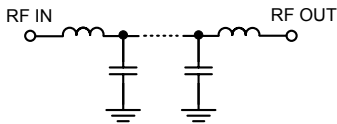
## Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
<b>Pass Band</b>	Insertion Loss	DC-F1	DC-1800	—	0.6	1.0	dB
	Freq. Cut-Off	F2	2100	—	3.5	—	dB
	VSWR	DC-F1	DC-1800	—	1.2	1.4	:1
<b>Stop Band</b>	Rejection Loss	F3-F4	2600-4500	20	31	—	dB
	VSWR	F3-F4	2600-4500	—	17	—	:1

## Applications

- Harmonic rejection
- Transmitters / receivers
- Lab use

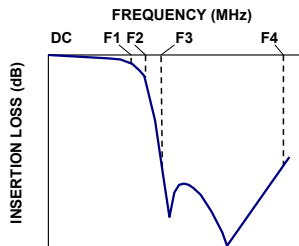
## Functional Schematic



Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	5W max. at 25°C

\* Derate linearly to 5W at 100°C ambient.  
Permanent damage may occur if any of these limits are exceeded.

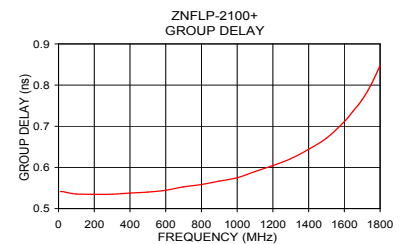
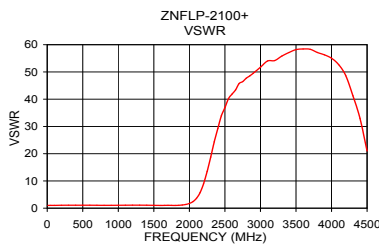
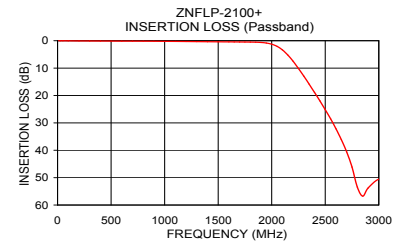
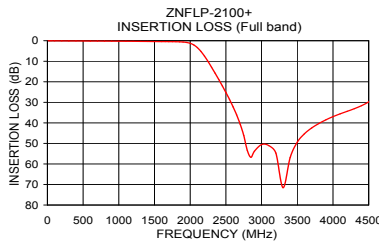
## Typical Frequency Response



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
10	0.01	1.01	10	0.54
200	0.08	1.06	50	0.54
500	0.13	1.09	100	0.54
1000	0.22	1.10	300	0.53
1800	0.49	1.01	500	0.54
2000	1.11	1.74	600	0.54
2050	1.81	2.41	700	0.55
2100	3.02	3.63	800	0.56
2200	7.11	8.99	900	0.57
2350	15.47	24.47	1000	0.57
2600	31.43	41.63	1100	0.59
2850	60.91	47.53	1200	0.60
3000	51.47	48.77	1300	0.62
3300	58.84	52.06	1400	0.64
3500	50.95	54.52	1500	0.67
3700	42.95	53.82	1600	0.71
4000	36.82	54.75	1650	0.74
4200	34.01	55.57	1700	0.76
4400	31.19	58.19	1750	0.80
4500	29.30	57.63	1800	0.85

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



### Notes

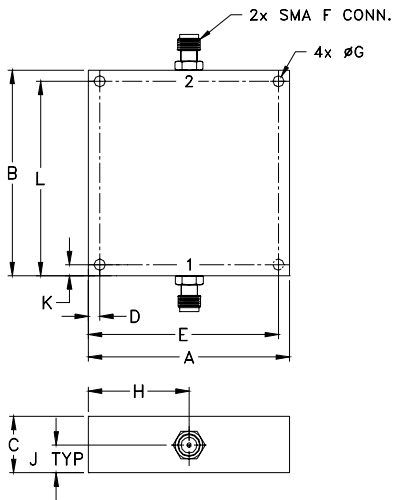
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuits' applicable established test performance criteria and measurement instructions.
- 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)



## Coaxial Connections

INPUT	1 (SMA Female)
OUTPUT	2 (SMA Female)

## Outline Drawing



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

A	B	C	D	E	F
<b>2.25</b>	<b>2.3</b>	<b>0.63</b>	<b>0.125</b>	<b>2.125</b>	-
57.15	58.42	16	3.18	53.98	-
G	H	J	K	L	wt.
<b>0.125</b>	<b>1.13</b>	<b>0.31</b>	<b>0.125</b>	<b>2.175</b>	<b>grams</b>
3.18	28.70	7.87	3.18	55.25	93

### 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-Circuit's 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/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

