Coaxial

Bandpass Filter

ZABP-495+

50Ω 470 to 520 MHz

CASE STYLE: UU1842

The Big Deal

- High rejection
- Good VSWR
- Connectorized package

Product Overview

ZABP-495+ is a 50Ω bandpass filter with a rugged connectorized package covering the passband of 470 to 520 MHz. The bandpass filter offers good matching within the passband and provides high rejection. This filter has miniature high Q capacitors and wire welded inductors for high reliability. It has repeatable performance across lots and consistent performance across temperature.

Key Features

Feature	Advantages
High rejection	ZABP-495+ has sharper transition and rejects spurious signals in the stopband.
Good VSWR	This filter maintains typical VSWR over passband frequency range making this filter easier to integrate into receiver and transmitter RF chains with less concerns for in band frequency ripple.
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.

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ZABP-495+

CASE STYLE: UU1842

Connectors	Model
SMA-M\F	ZABP-495-S+

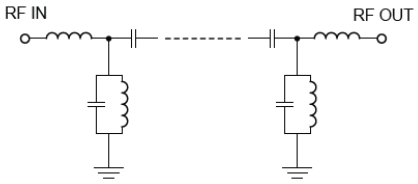
Features

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

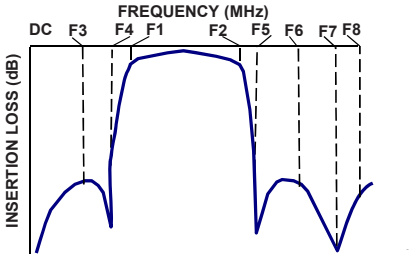
Applications

- Harmonic rejection
- Transmitters / receivers
- TV broadcasting
- Test equipment

Functional Schematic



Typical Frequency Response



+RoHS Compliant

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

Electrical Specifications at 25°C

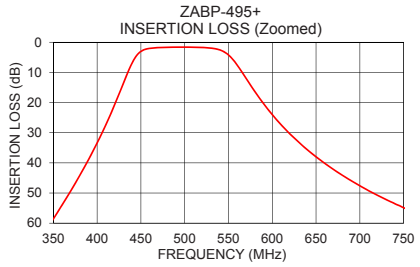
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	495	-	MHz
	Insertion Loss	F1-F2	470-520	-	1.8	3.0	dB
	VSWR	F1-F2	470-520	-	1.2	1.55	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 300	60	76	-	dB
		F3-F4	300 - 410	20	27	-	dB
	VSWR	DC-F4	DC - 410	-	20	-	:1
Stop Band, Upper	Insertion Loss	F5-F6	625 - 800	20	31	-	dB
		F6-F7	800 - 3200	-	55	-	dB
		F7-F8	3200 - 4000	-	40	-	dB
	VSWR	F5-F8	625 - 4000	-	20	-	:1

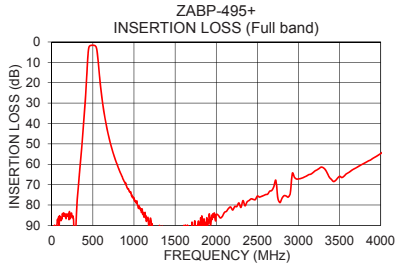
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1 W max.

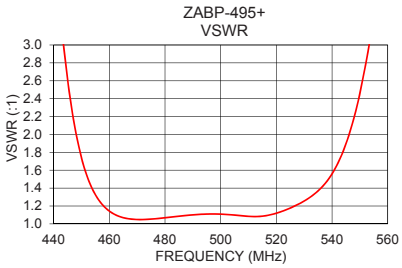
Permanent damage may occur if any of these limits are exceeded.

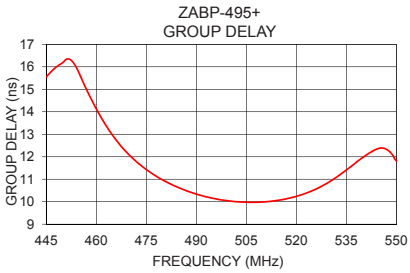
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	97.07	192.68	470	12.06
100	87.64	75.93	472	11.78
300	84.96	146.41	474	11.54
405	30.44	30.98	476	11.33
410	27.34	26.36	478	11.13
420	20.72	17.94	480	10.96
430	13.59	10.19	482	10.81
450	3.03	1.74	484	10.67
455	2.34	1.33	486	10.55
470	1.77	1.05	490	10.34
495	1.62	1.11	492	10.26
520	1.73	1.12	495	10.15
545	3.17	1.89	496	10.12
570	12.13	7.92	497	10.09
590	20.50	15.68	498	10.07
620	30.44	27.68	500	10.03
625	31.84	29.75	504	9.98
800	60.63	84.05	510	9.99
3200	63.30	42.91	516	10.10
4000	54.74	36.77	520	10.24









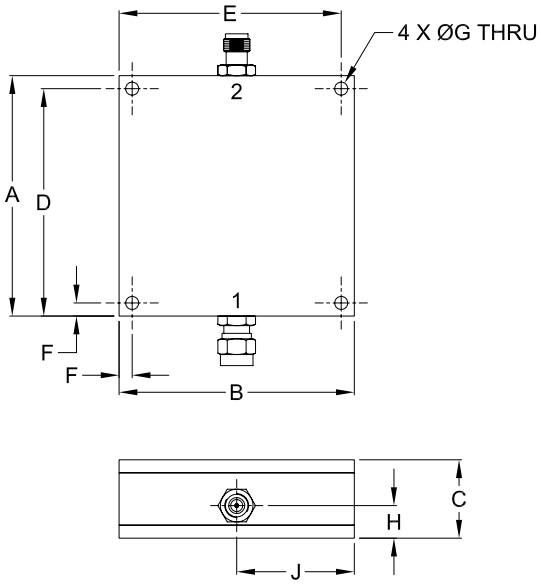
Notes

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

Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E
2.300	**2.250**	**.750**	**2.175**	**2.125**
58.42	57.15	19.05	55.25	53.98

F	G	H	J	wt.
.125	**.125**	**.312**	**1.125**	**grams**
3.18	3.18	7.93	28.58	124