



COAXIAL

Bandpass Filter

ZABP-141-S+

Mini-Circuits

50Ω 110 to 180 MHz

THE BIG DEAL

- High rejection
- Good Return Loss
- Connectorized package



Generic photo used for illustration purposes only

APPLICATIONS

- Military communications
- Receivers / Transmitters
- Harmonic rejection
- Test equipment

Model No.	ZABP-141-S+
Case Style	UU1842
Connectors	SMA-FEMALE

+RoHS Compliant

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

PRODUCT OVERVIEW

ZABP-141-S+ is a 50Ω bandpass filter with a rugged connectorized package covering the passband of 110 to 180 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-141-S+ has sharper transition and rejects spurious signals in the stopband.
Good Return Loss	This filter maintains typical Return Loss 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.

REV. C
ECO-019470
ZABP-141-S+
EDU2935
URJ
231006





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ELECTRICAL SPECIFICATIONS AT 25°C

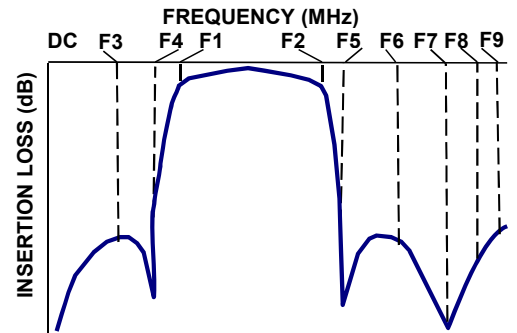
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Units	
Passband	Center Frequency	—	—	141	—	MHz	
	Insertion Loss	F1-F2	—	1.3	2.0	dB	
	Return Loss	F1-F2	110 - 180	11.7	17.7	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 90	—	40	—	dB
		F3-F4	90 - 92	20	38	—	dB
Stop Band, Upper	Rejection	F5-F6	213 - 217	20	33	—	dB
		F6-F7	217 - 1600	—	40	—	
		F7-F8	1600 - 3000	—	50	—	
		F8-F9	3000 - 3500	—	35	—	

MAXIMUM RATINGS

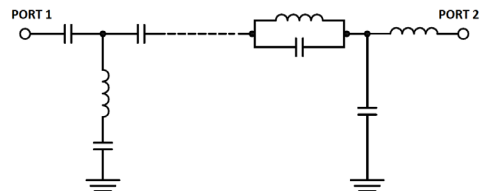
Parameter	Ratings
Operating temperature	-40°C to +85°C
Storage temperature	-55°C to +100°C
RF Power Input	0.2W max

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

TYPICAL FREQUENCY RESPONSE



FUNCTIONAL SCHEMATIC





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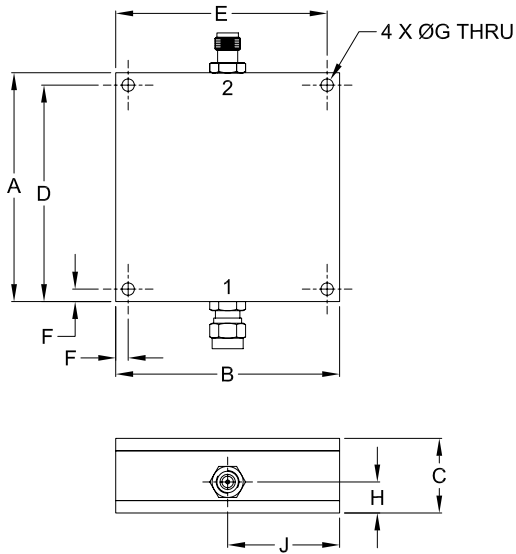
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COAXIAL CONNECTIONS

PORT 1	SMA-MALE
PORT 2	SMA-FEMALE

OUTLINE DRAWING



OUTLINE DIMENSIONS (Inches/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

Note. Please refer to case style drawing for details



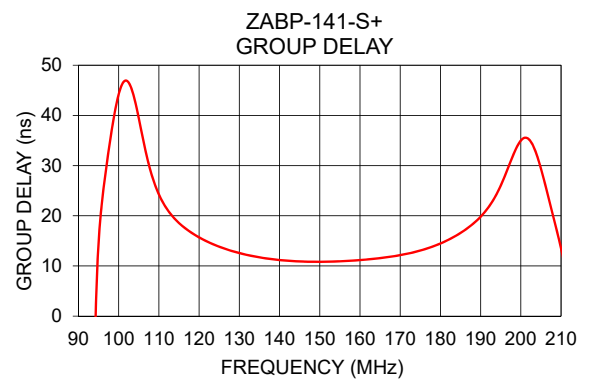
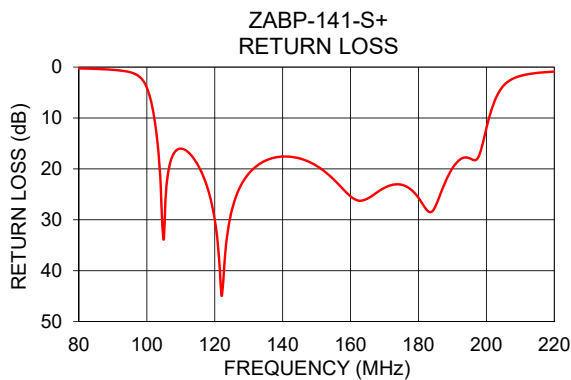
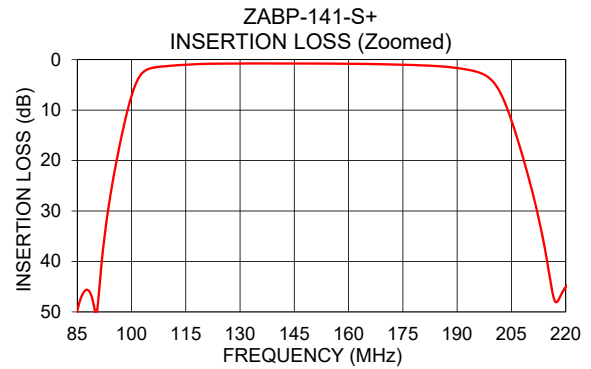
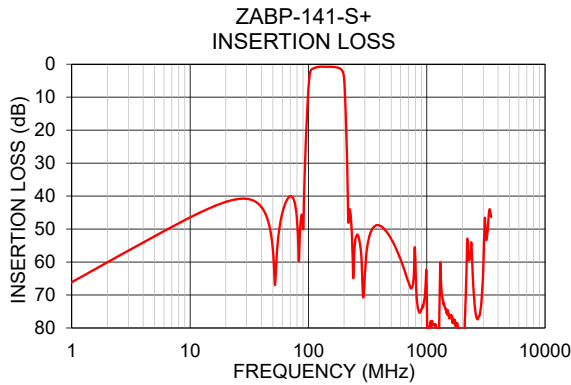
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TYPICAL PERFORMANCE DATA AT 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group (nsec)
1	66.07	0.01	110	24.23
90	50.03	0.54	114	19.35
92	38.53	0.67	118	16.67
96	19.57	1.21	124	14.15
103	2.64	14.03	130	12.57
110	1.26	16.02	136	11.58
141	0.77	17.57	141	11.10
180	1.12	25.69	145	10.90
198	3.19	17.16	148	10.84
209	21.42	1.95	154	10.90
213	33.00	1.33	157	11.02
217	47.85	1.02	160	11.17
1600	77.03	0.58	165	11.56
3000	62.58	0.94	170	12.15
3500	46.30	0.90	180	14.48



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

