Bandpass Filter

ZABP-59+

 50Ω 30 to 88 MHz

The Big Deal

- Broader bandwidth
- High rejection
- Wide stopband
- Connectorized package



CASE STYLE: UU1842

Product Overview

ZABP-59+ is a 50Ω bandpass filter with a rugged connectorized package covering the passband of 30 to 88 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-59+ 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.		

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.

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Bandpass Filter

 50Ω 30 to 88 MHz

ZABP-59+



Connectors

SMA-M\F ZABP-59-S+

ZABP-59+ INSERTION LOSS (Full band)

Flectrical Specifications at 25°C

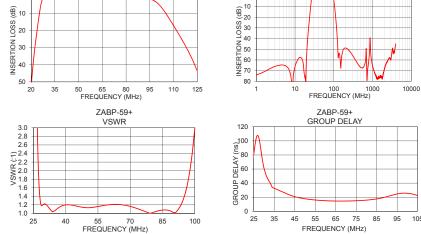
Electrical opecinications at 25 0							
Parameter		F#	Frequency (MHz)	Min.	Тур.	Max.	Unit
	Center Frequency	-	-	-	59	-	MHz
Pass Band	Insertion Loss	F1-F2	30-88	-	1.0	2.5	dB
	VSWR	F1-F2	30-88	-	1.3	1.9	:1
	Insertion Loss	DC-F3	DC - 16	50	57	-	dB
Stop Band, Lower		F3-F4	16-22	20	30	-	dB
	VSWR	DC-F4	DC - 22	-	20	-	:1
		F5-F6	115-140	20	25	-	dB
Stop Band, Upper Insertion Loss	F6-F7	140-600	40	48	-	dB	
	Insertion Loss	F7-F8	600-1100	30	38	-	dB
	F8-F9	1100-3000	-	45	-	dB	
		F9-F10	3000-4000	-	30	-	dB
	VSWR	F5-F10	115-4000	-	10	-	:1

Maximum Ratings				
Operating Temperature	-40°C to 85°C			
Storage Temperature	-55°C to 100°C			
RF Power Input	0.25 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)
1.0	74.08	13931.97	30	60.69
16.0	61.92	286.71	32	44.85
22.0	33.18	80.92	34	33.88
22.2	31.56	77.12	36	31.31
23.8	19.77	42.69	38	28.74
26.6	3.41	3.78	40	26.20
30.0	0.67	1.22	45	20.68
59.0	0.51	1.20	50	17.65
88.0	1.00	1.07	55	15.90
91.0	1.17	1.02	58	15.23
93.0	1.36	1.15	59	15.06
99.0	3.45	2.50	60	14.90
112.0	20.20	13.96	65	14.44
115.0	24.88	16.03	68	14.38
119.0	31.55	18.07	70	14.43
140.0	54.19	23.48	74	14.73
600.0	66.08	33.82	78	15.32
1100.0	70.56	18.91	80	15.75
3000.0	59.68	4.00	85	17.45
4000.0	44.88	7.40	88	19.15



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· Low insertion loss High rejection

Features

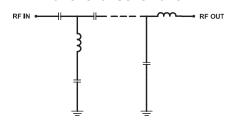
- Wide stopband
- · Connectorized package

· Broader bandwidth

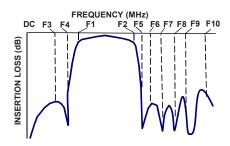
Applications

- Telecommunication and broadband networks
- · Air traffic control communication
- Private and Public land mobile
- Transmitters/ Receivers
- Test equipment

Functional Schematic



Typical Frequency Response



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

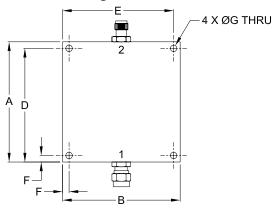
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ZABP-59+ INSERTION LOSS (Zoomed)

Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

Outline Drawing





Outline Dimensions (inch)

E	D	С	В	Α
2.125	2.175	.750	2.250	2.300
53.98	55.25	19.05	57.15	58.42
wt.	J	Н	G	F
grams	1.125	.312	.125	.125
124	28.58	7.93	3.18	3.18

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