

# Coaxial Bandpass Filter

## ZABP-598-S+

50Ω 410 to 785 MHz



Generic photo used for illustration purposes only  
CASE STYLE: UU1842

### The Big Deal

- High rejection
- Good VSWR
- Connectorized package

### Product Overview

ZABP-598-S+ is a 50Ω bandpass filter with a rugged connectorized package covering the passband of 410 to 785 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-598-S+ 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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## ZABP-598-S+

50Ω 410 to 785 MHz



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CASE STYLE: UU1842  
Connectors SMA-MF Model ZABP-598-S+

### Features

- Broad bandwidth
- Sharper cut-off
- Good VSWR
- Connectorized package

### Applications

- Digital television
- Broad band wireless 4G LTE band
- Biomedical telemetry devise
- Wireless microphone
- Test equipment

### Electrical Specifications at 25°C

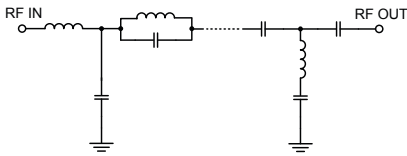
Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
<b>Pass Band</b>	Center Frequency	-	-	598	-	MHz	
	Insertion Loss	F1-F2	410 - 785	-	2.7	4.5	dB
	VSWR	F1-F2	410 - 785	-	1.46	1.92	:1
<b>Stop Band, Lower</b>	Insertion Loss	DC-F3	DC - 385	20	34	-	dB
	VSWR	DC-F3	DC - 385	-	20	-	:1
<b>Stop Band, Upper</b>	Insertion Loss	F4-F5	825 - 1000	20	35	-	dB
		F6-F7	1000 - 1500	40	46	-	dB
	VSWR	F4-F7	825 - 1600	-	20	-	:1

### Maximum Ratings

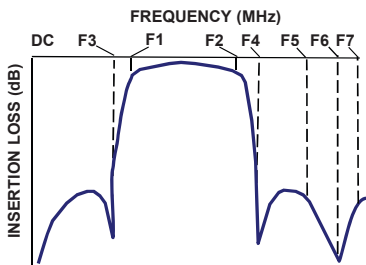
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	1 W max.

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

### Functional Schematic



### Typical Frequency Response

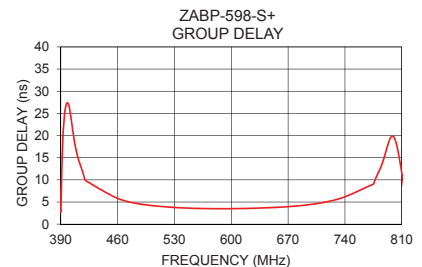
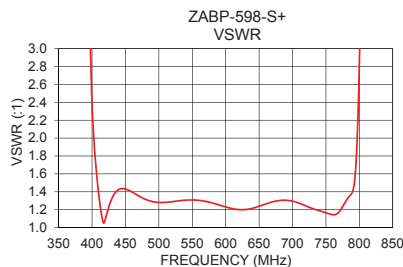
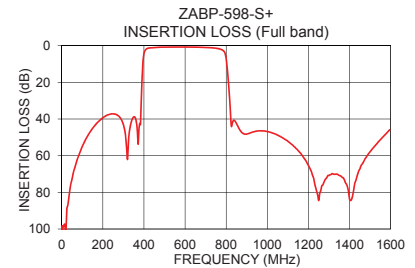
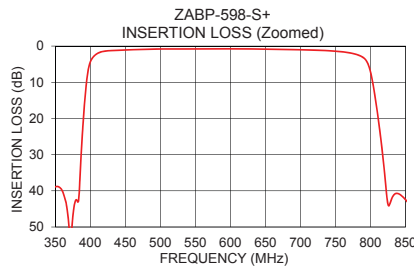


### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (ns)
1	102.62	4921.74	410	15.79
50	72.90	493.06	450	6.71
100	55.00	158.05	475	4.98
385	37.04	12.64	500	4.24
387	29.50	11.35	525	3.83
390	20.23	9.03	550	3.60
404	3.02	1.85	575	3.50
410	2.04	1.37	598	3.50
598	0.76	1.23	600	3.50
785	2.67	1.35	625	3.58
790	3.23	1.40	650	3.74
811	20.21	7.78	675	4.02
817	29.62	10.20	700	4.50
825	43.90	12.81	710	4.78
1000	46.84	44.26	725	5.33
1200	65.43	64.85	750	6.95
1300	70.79	67.80	760	7.78
1400	83.73	67.54	770	8.63
1500	57.84	65.68	780	11.20
1600	45.26	61.65	785	13.24

### +RoHS Compliant

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



### Notes

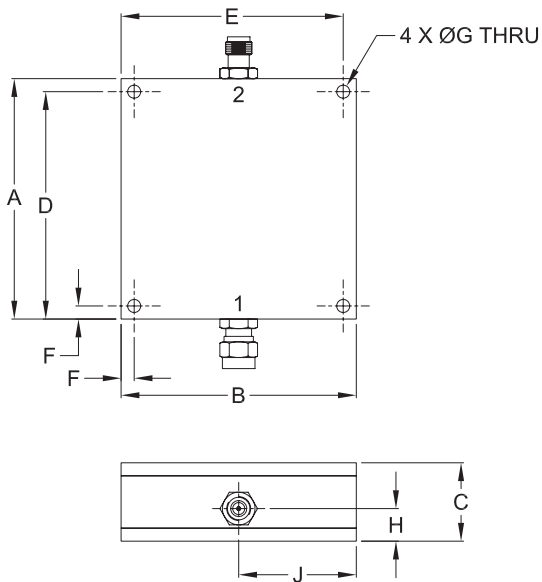
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## Coaxial Connections

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

## Outline Drawing



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

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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