

# Coaxial Bandpass Filter

## ZX75BP-1940+

50Ω 1710 to 2170 MHz

### The Big Deal

- Fast roll-off on the upper sideband
- Good Matching and low loss in the pass band
- Connectorized package



CASE STYLE: KE1467

### Product Overview

ZX75BP-1940+ is a wideband bandpass filter in a rugged connectorized package covering 1710 to 2170 MHz. This is designed for asymmetric rejection applications such as super-heterodyne receivers. By having asymmetric band, faster roll-off at upper side band is achieved in a comparatively smaller package and lower pass band insertion loss. It has repeatable performance across lots and consistent performance across temperature

### Key Features

Feature	Advantages
Fast roll-off on the upper side band	Wide bandwidth filter with fast-roll off on the upper side band, which increases selectivity on the adjacent channel.
Good matching and low loss in pass band	This filter has good matching and low loss in the pass band
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.
High power handling	This model uses high Q capacitors and high current handling inductors which is well suited for high power applications.

#### 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 1710 to 2170 MHz

## ZX75BP-1940+



CASE STYLE: KE1467  
 Connectors Model  
**SMA-MF** ZX75BP-1940-S+

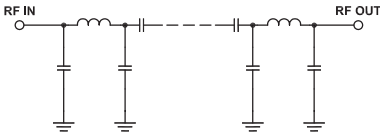
### Features

- Fast roll-off on the upper side band
- Good matching in the pass band
- Connectorized package

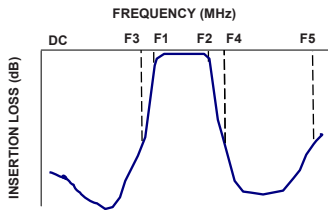
### Applications

- Defense systems
- Cable TV relay
- DECT, GSM and IMT
- Mobile satellite
- Private and public land mobile
- PCS Broadband

### Functional Schematic



### Typical Frequency Response



### Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	1940	-	MHz
	Insertion Loss	F1-F2	1710-2170	0.7	2.0	dB
	VSWR	F1-F2	1710-2170	-	1.2	1.78
Stop Band, Lower	Insertion Loss	DC-F3	DC - 150	20	30	dB
	VSWR	DC-F3	DC - 150	-	20	-
Stop Band, Upper	Insertion Loss	F4-F5	2800-4000	20	31	dB
	VSWR	F4-F5	2800-4000	-	20	-

### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	8 W max.

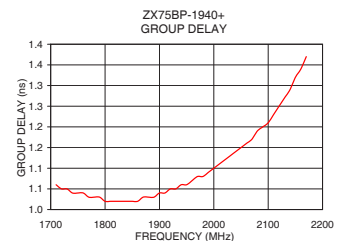
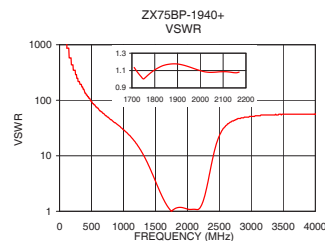
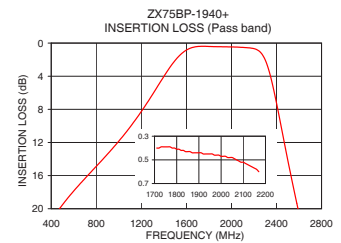
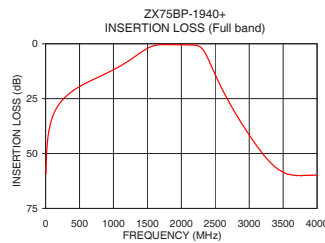
Permanent damage may occur if any of these limits are exceeded.

### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
5	59.48	-1737.18	1710	1.06
40	41.47	-1737.18	1730	1.05
150	30.00	579.06	1750	1.04
400	21.49	133.63	1780	1.03
750	15.61	49.64	1800	1.02
1250	7.24	13.70	1830	1.02
1450	3.00	4.78	1850	1.02
1530	1.63	2.89	1870	1.03
1710	0.40	1.14	1890	1.03
1940	0.45	1.15	1900	1.04
2170	0.60	1.08	1920	1.05
2280	1.52	2.08	1940	1.06
2340	3.67	4.36	1960	1.07
2400	7.26	9.43	1980	1.08
2500	14.13	22.87	2000	1.10
2600	20.58	34.75	2030	1.13
2800	31.78	46.96	2050	1.15
3000	41.55	51.10	2100	1.21
3500	58.35	56.04	2140	1.29
4000	60.06	56.04	2170	1.37

### +RoHS Compliant

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



### Notes

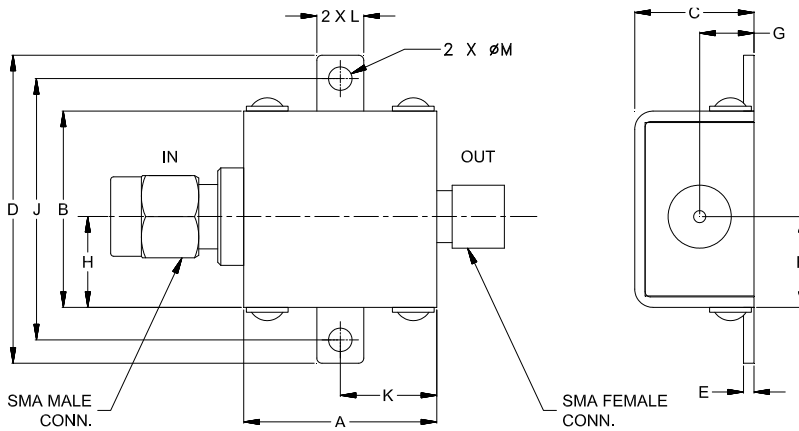
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## Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

## Outline Drawing



## Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.74	.75	.46	1.18	.04	.349	.21
18.80	19.05	11.68	29.97	1.02	8.86	5.33
H	J	K	L	M	Wt.	
.349	1.00	.37	.18	.09	grams	
8.86	25.40	9.40	4.57	2.29	24.4	

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