Coaxial

Bandpass Filter

ZX75BP-1940-S+

50Ω 1710 to 2170 MHz



CASE STYLE: KE1467

The Big Deal

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

Product Overview

ZX75BP-1940-S+ 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.
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

Bandpass Filter

ZX75BP-1940-S+

50Ω 1710 to 2170 MHz



CASE STYLE: KE1467

Connectors	Model
SMA-M\F	ZX75BP-1940-S+

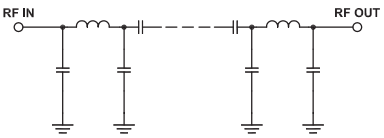
Features

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

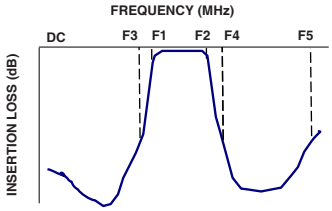
Applications

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

Functional Schematic



Typical Frequency Response



+RoHS Compliant

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

Electrical Specifications at 25°C

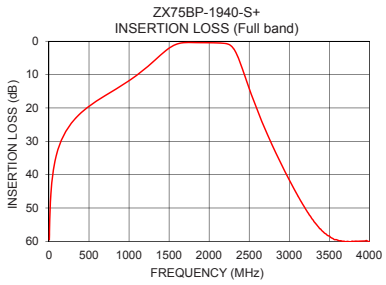
Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	-	1940	-	MHz
	Insertion Loss	F1-F2	1710-2170	-	0.7	2.0	dB
	VSWR	F1-F2	1710-2170	-	1.2	1.78	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 150	20	30	-	dB
	VSWR	DC-F3	DC - 150	-	20	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	2800-4000	20	31	-	dB
	VSWR	F4-F5	2800-4000	-	20	-	:1

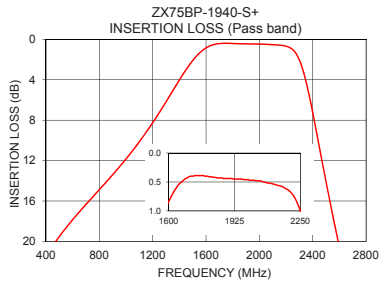
Maximum Ratings	
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	8 W max.

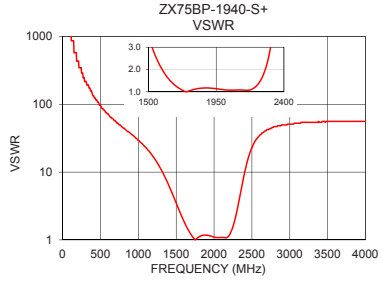
Permanent damage may occur if any of these limits are exceeded.

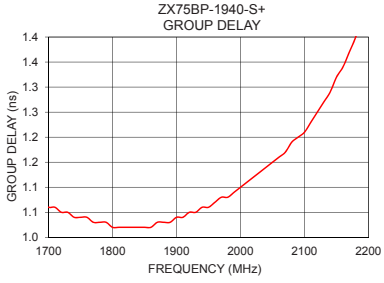
Typical Performance Data at 25°C

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









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.

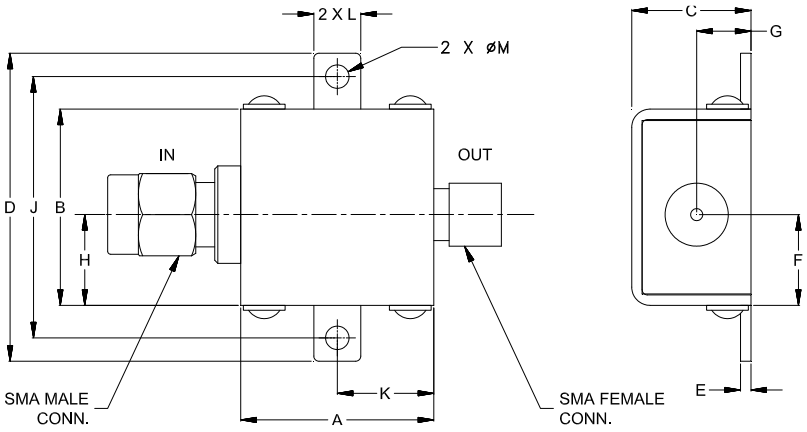
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.

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	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

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