



LUMPED LC COAXIAL

# Bandpass Filter

## ZX75BP-140-S+

50Ω 130 to 150 MHz SMA-Male to SMA-Female

### KEY FEATURES

- Insertion Loss, 3.5dB Max.
- Stop Band Return Loss, 17dB Typ.
- Stop Band Rejection, 45dB Typ.



Generic photo used for illustration purposes only

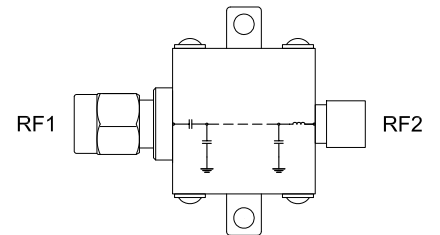
### APPLICATIONS

- Aircraft Communication
- Space Research
- Defense System
- Satellite

### PRODUCT OVERVIEW

ZX75BP-140-S+ is a 50Ω bandpass filter in a connectorized package covering 130 to 150MHz. This offers good matching within the passband and high rejection in stopband.

### FUNCTIONAL DIAGRAM



### ELECTRICAL SPECIFICATIONS<sup>1</sup> AT +25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	Fc	—	140	—	MHz
	Insertion Loss	F1-F2	130 - 150	—	3.5	dB
	Return Loss	F1-F2	130 - 150	12	17.5	dB
Stop Band, Lower	Rejection	DC-F3	DC - 40	35	45	dB
		F3-F4	40 - 100	20	29	dB
Stop Band, Upper	Rejection	F5-F6	180 - 300	20	27	dB
		F6-F7	300 - 1500	35	45	dB
		F7-F8	1500 - 6000	—	30	—
Maximum Deviation from Linear Phase	Fc ±15MHz	125 - 155	—	±9	±14	deg

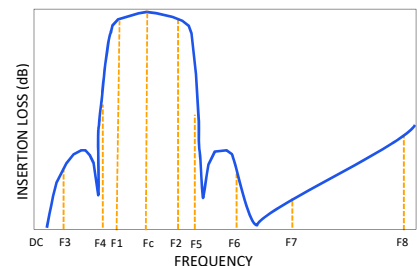
1. This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

### ABSOLUTE MAXIMUM RATINGS<sup>2</sup>

Parameter	Ratings
Operating Temperature	-40°C to + 85°C
Storage Temperature	-55°C to + 100°C
Input Power <sup>3</sup>	0.3W max.

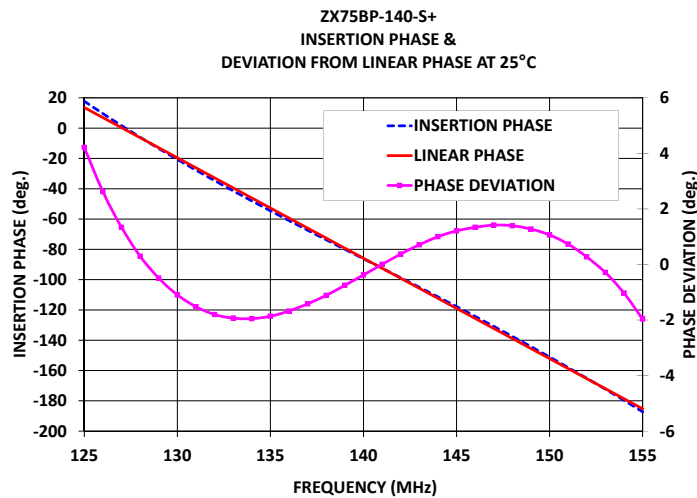
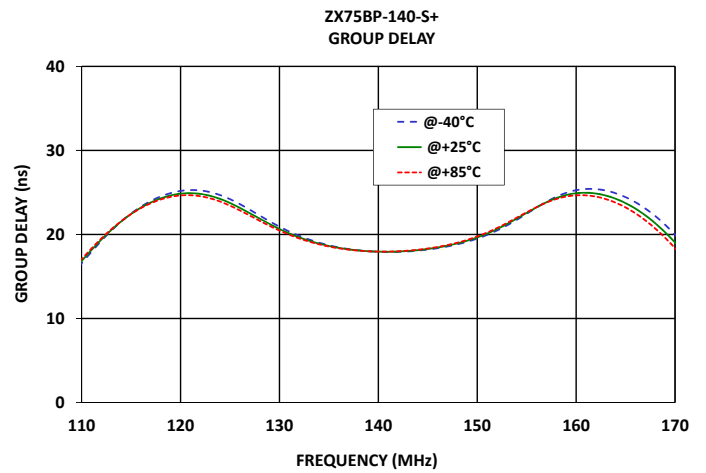
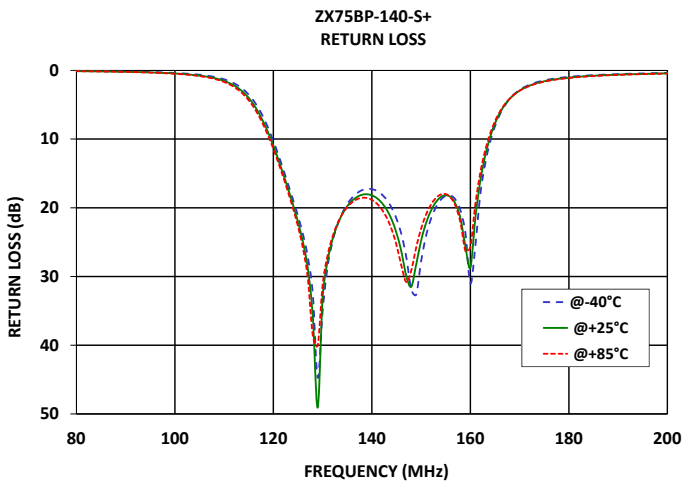
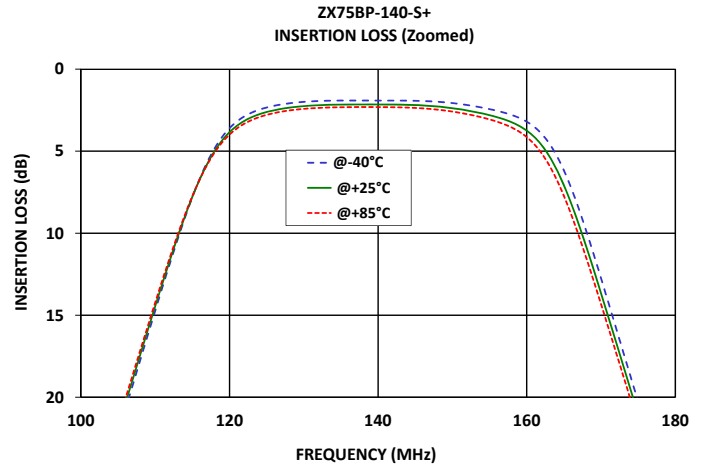
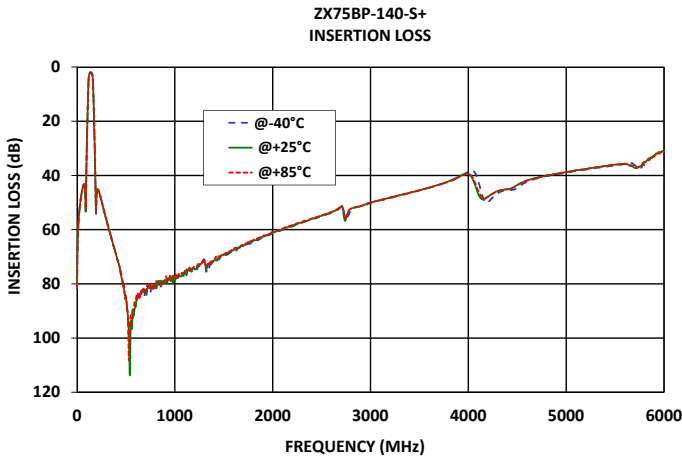
2. Permanent damage may occur if any of these limits are exceeded.  
 3. Power rating applies only to signals within the passband.

### TYPICAL FREQUENCY RESPONSE AT +25°C





### TYPICAL PERFORMANCE GRAPHS





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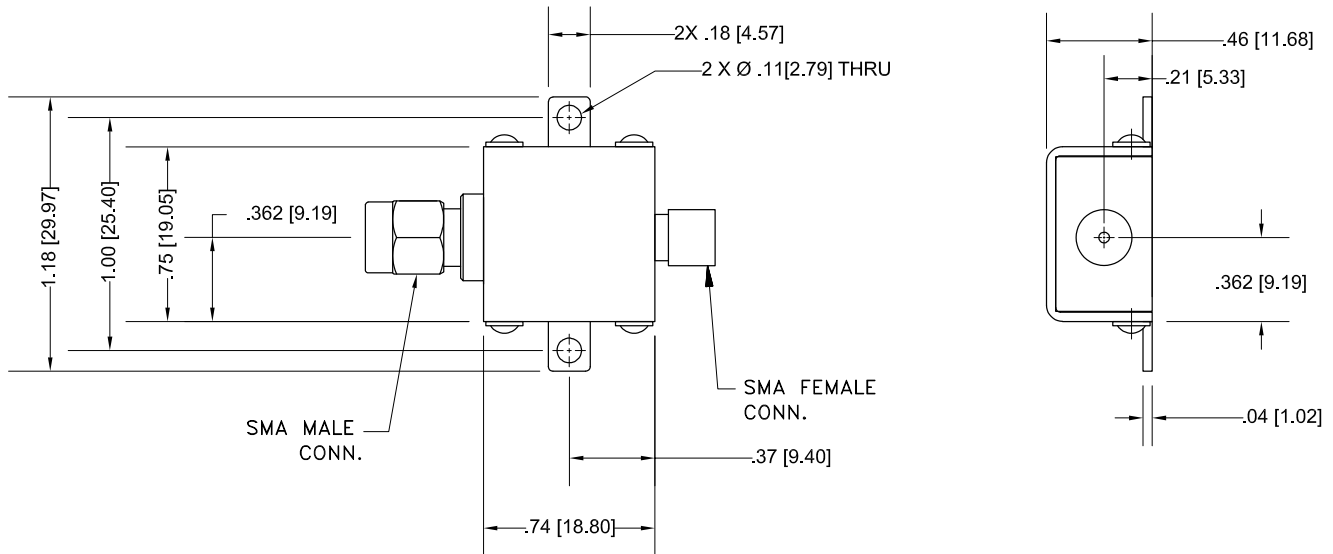
Mini-Circuits

50Ω 130 to 150 MHz SMA-Male to SMA-Female

### CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1 <sup>1</sup>	1	SMA Male
RF2 <sup>1</sup>	2	SMA Female

### CASE STYLE DRAWING



**Weight: 24.4 gram**

**Dimensions are in inches (mm). Tolerances: 2PI. ± .03; 3PI. ± .015**

**Tolerance on hole size and interaxes dimensions to be ± .005.**

**PRODUCT MARKING\*:** ZX75BP-140-S+

\*Marking may contain other features or characters for internal lot control.



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ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data Graphs S-Parameter (S2P Files) Data Set (.zip file)
Case Style	KE1467
RoHS Status	Compliant
Environmental Ratings	ENV46

### 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-Circuits' 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/terms/viewterm.html](http://www.minicircuits.com/terms/viewterm.html)

