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.

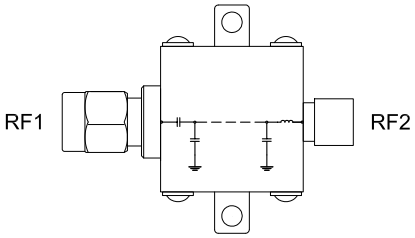


Generic photo used for illustration purposes only

APPLICATIONS

- Aircraft Communication
- Space Research
- Defense System
- Satellite

FUNCTIONAL DIAGRAM



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.

ELECTRICAL SPECIFICATIONS[1] 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	—	
Stop Band, Upper	Rejection	F5-F6	180 - 300	20	27	—	dB
		F6-F7	300 - 1500	35	45	—	
		F7-F8	1500 - 6000	—	30	—	
Maximum Deviation from Linear Phase		Fc ±15MHz	125 - 155		±9	±14	deg

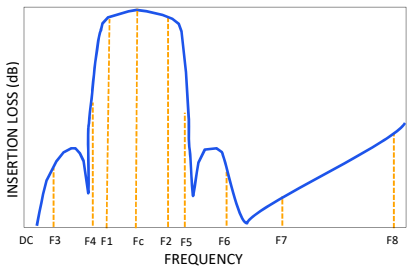
1. This filter is bi-directional RF1 and RF2 ports may be interchanged, see S-Parameters for actual performance.

ABSOLUTE MAXIMUM RATINGS[2]

Parameter	Ratings
Operating Temperature	-40°C to + 85°C
Storage Temperature	-55°C to + 100°C
Input Power[3]	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



REV. A
ECO-019558
ZX75BP-140-S+
EDU4622
URJ
231012

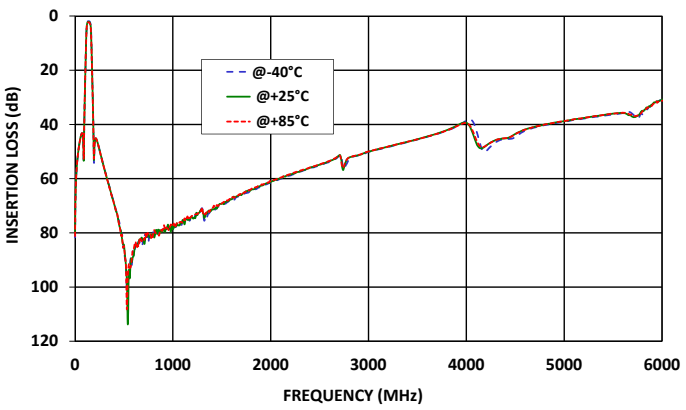
Bandpass Filter

ZX75BP-140-S+

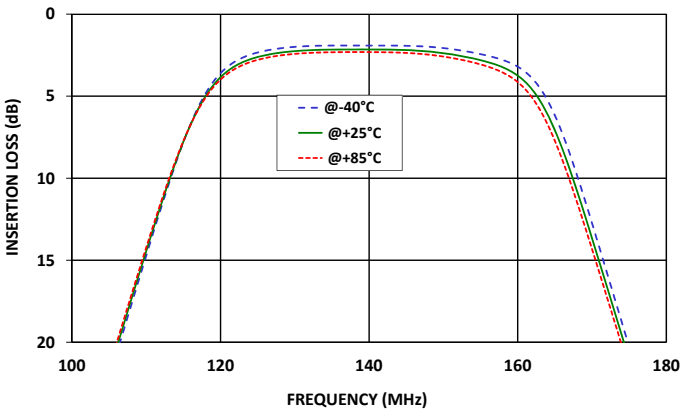
50Ω 130 to 150 MHz SMA-Male to SMA-Female

TYPICAL PERFORMANCE GRAPHS

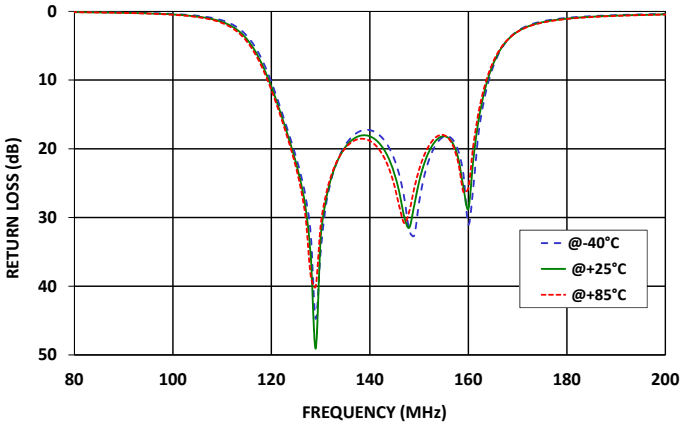
ZX75BP-140-S+
INSERTION LOSS



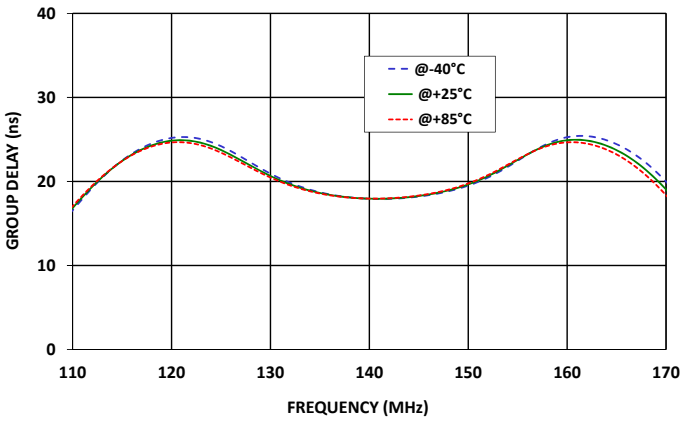
ZX75BP-140-S+
INSERTION LOSS (Zoomed)



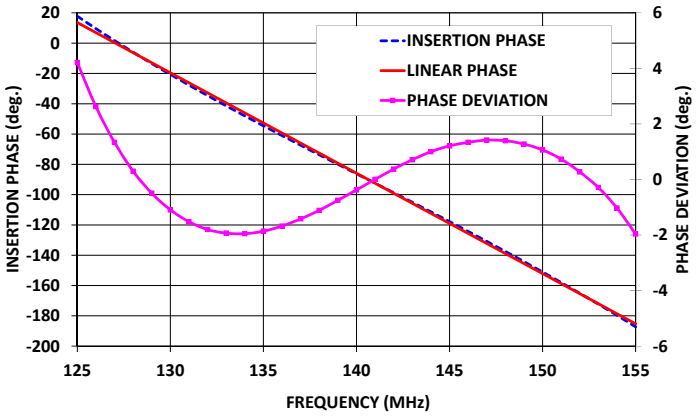
ZX75BP-140-S+
RETURN LOSS



ZX75BP-140-S+
GROUP DELAY



ZX75BP-140-S+
INSERTION PHASE &
DEVIATION FROM LINEAR PHASE AT 25°C



Bandpass Filter

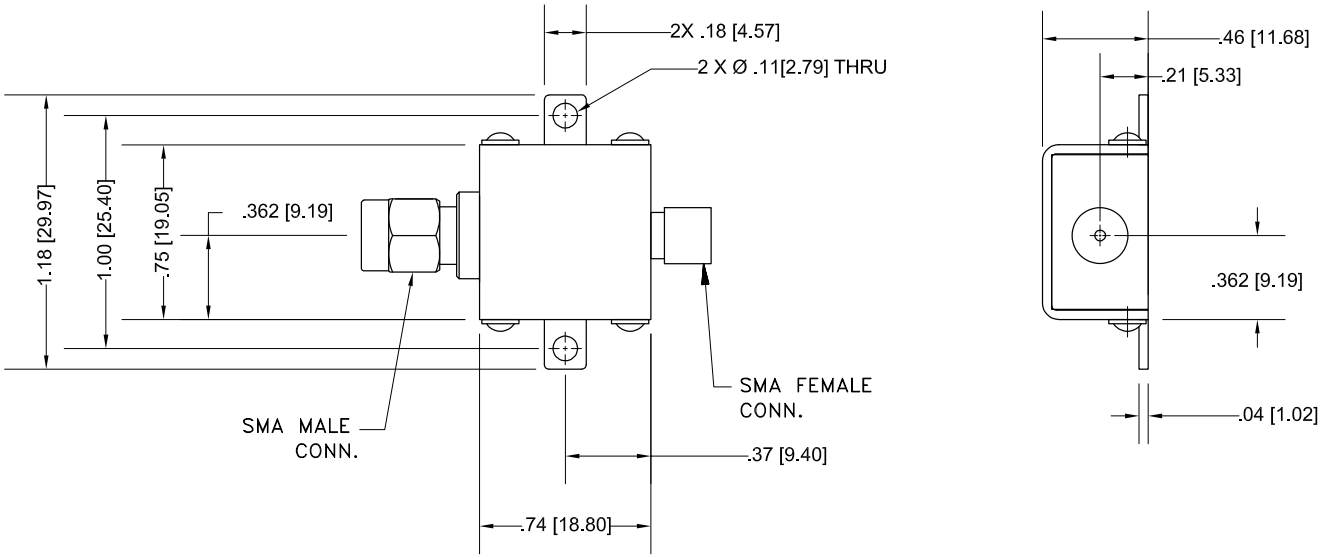
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CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1[1]	1	SMA Male
RF2[1]	2	SMA Female

CASE STYLE DRAWING



Weight: 24.4 gram
Dimensions are in inches (mm). Tolerances: 2Pl. ± .03; 3Pl. ± .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