



Mini-Circuits

LUMPED LC COAXIAL

Bandpass Filter

ZX75BP-435-S+50 Ω

420 to 450 MHz

SMA-Female

KEY FEATURES

- Good Insertion Loss, 1.5 dB Typ.
- Passband Return Loss, 22 dB Typ.
- Stopband Rejection, 30 dB Typ.

APPLICATIONS

- Defense
- Military
- Telecom
- Radar and Satellite

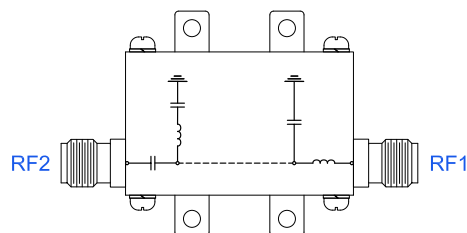
PRODUCT OVERVIEW

ZX75BP-435-S+ is a 50 Ω bandpass filter in a connectorized package covering 420 to 450 MHz. This offers good matching within the passband and high rejection in stopband.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS¹ AT +25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Units
Passband	Center Frequency	Fc	—	—	435	—	MHz
	Insertion Loss	F1-F2	420 - 450	—	1.5	2.1	dB
	Return Loss	F1-F2	420 - 450	12	22	—	dB
Stopband, Lower	Rejection	DC-F3	DC - 380	22	28	—	dB
Stopband, Upper	Rejection	F4-F5	500 - 3000	24	30	—	dB

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

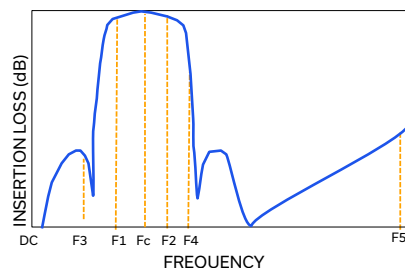
ABSOLUTE MAXIMUM RATINGS²

Parameter	Ratings
Operating Temperature	-40°C to + 85°C
Storage Temperature	-55°C to + 100°C
Input Power ³	2 W at 25°C

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

3. Power rating applies only to signals within the passband. Derated power at +85°C is 1 W.

TYPICAL FREQUENCY RESPONSE AT +25°C



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REV. OR
ECO-026903
ZX75BP-435-S+
EDU4941
URJ
250910

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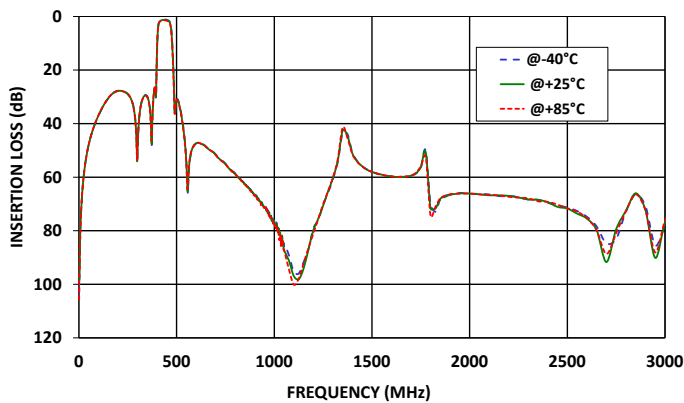
50 Ω

420 to 450 MHz

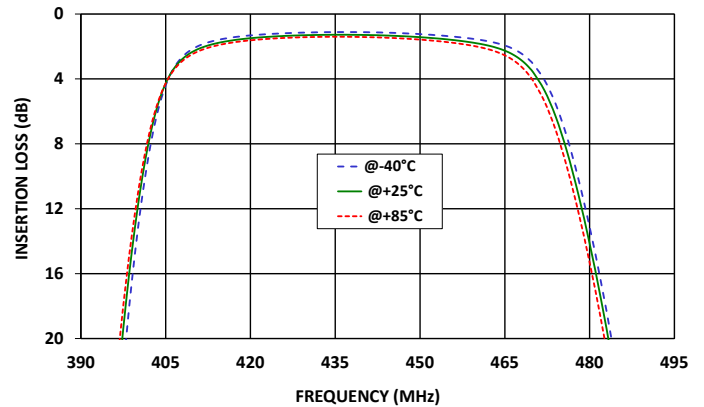
SMA-Female

TYPICAL PERFORMANCE GRAPHS

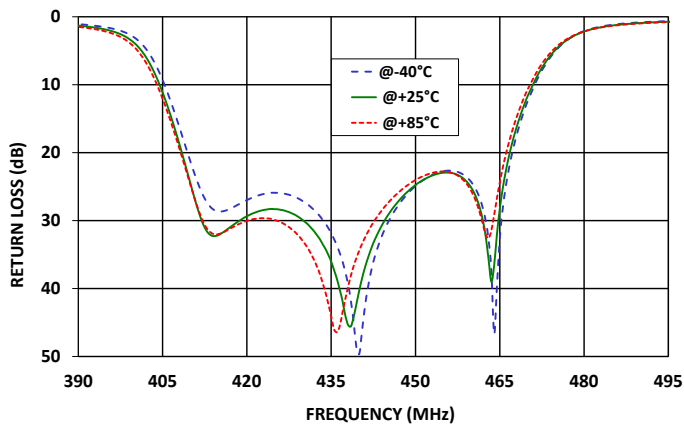
ZX75BP-435-S+
INSERTION LOSS



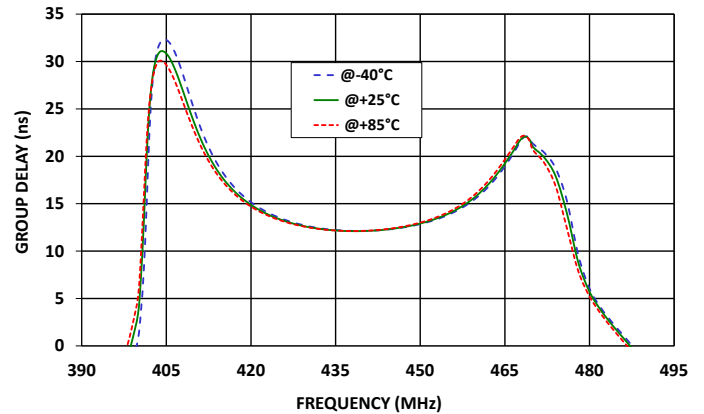
ZX75BP-435-S+
INSERTION LOSS (Zoomed)



ZX75BP-435-S+
RETURN LOSS



ZX75BP-435-S+
GROUP DELAY





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50Ω

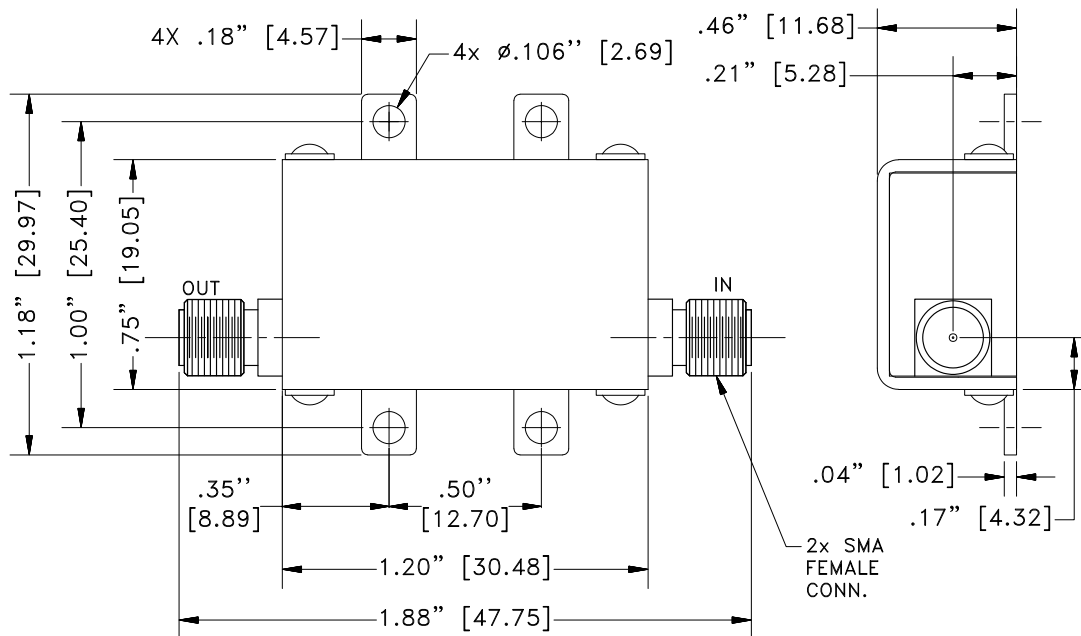
420 to 450 MHz

SMA-Female

CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF1 ¹	—	SMA Female
RF2 ¹	—	SMA Female

CASE STYLE DRAWING



Weight: 35.0 grams

Dimensions are in inches (mm). Tolerances: 2Pl. $\pm$.03; 3Pl. $\pm$.015

Tolerance on hole size and interaxes dimensions to be $\pm$.005

PRODUCT MARKING*: ZX75BP-435-S+

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



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SMA-Female

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S2P Files) Data Set (.zip file)
Case Style	HY1239
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

