



Mini-Circuits

LUMPED LC COAXIAL

Bandpass Filter

ZX75BP-188-S+

50Ω 138 to 238 MHz SMA-Male to SMA-Female

KEY FEATURES

- Insertion Loss, 1.8dB Typ.
- Pass Band Return Loss, 16dB Typ.
- Stop Band Rejection, 30dB Typ.

APPLICATIONS

- Auxiliary Broadcasting
- Biomedical Telemetry Devices
- Private and Public Land Mobile
- Digital Television

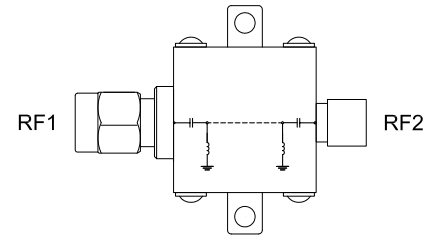
PRODUCT OVERVIEW

ZX75BP-188-S+ is a 50Ω bandpass filter in a connectorized package covering 138 to 238MHz. 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	188	—	—	—	MHz
	Insertion Loss	F1-F2	138 - 238	—	1.8	3	dB
	Return Loss	F1-F2	138 - 238	10	16	—	dB
Stop Band, Lower	Rejection	DC-F3	DC - 60	35	—	—	dB
		F3-F4	60 - 96	20	—	—	
Stop Band, Upper	Rejection	F5-F6	315 - 400	20	—	—	dB
		F6-F7	400 - 1500	35	—	—	
		F7-F8	1500 - 3600	—	30	—	

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

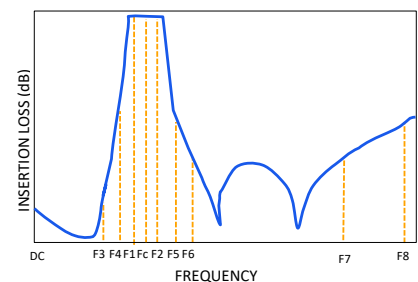
ABSOLUTE MAXIMUM RATINGS²

Parameter	Ratings
Operating Temperature	-40°C to + 85°C
Storage Temperature	-55°C to + 100°C
Input Power ³	0.25W

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



Mini-Circuits

www.minicircuits.com P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. A
ECO-019558
ZX75BP-188-S+
EDU4621
URJ
231012

PAGE 1 OF 4



LUMPED LC COAXIAL

Bandpass Filter

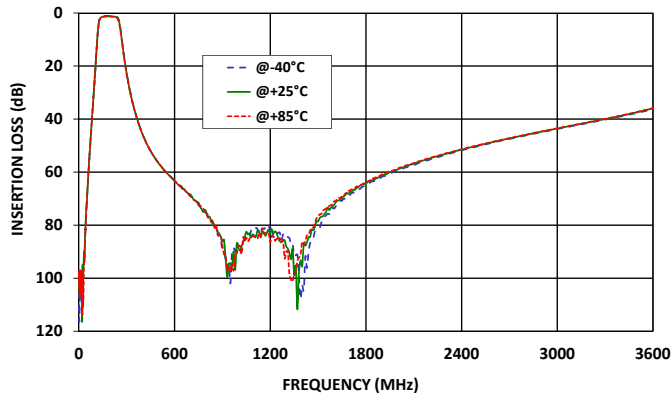
ZX75BP-188-S+

Mini-Circuits

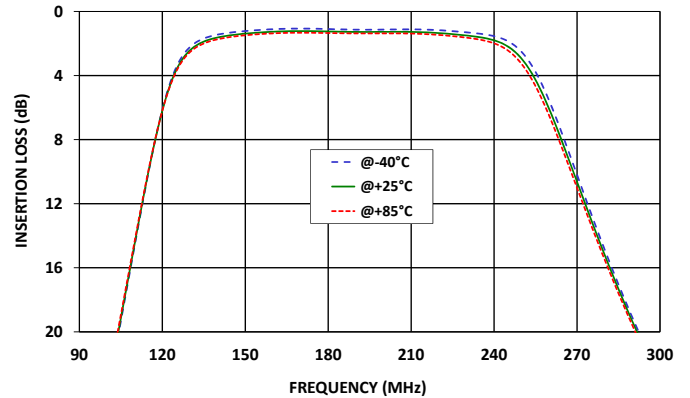
50Ω 138 to 238 MHz SMA-Male to SMA-Female

TYPICAL PERFORMANCE GRAPHS

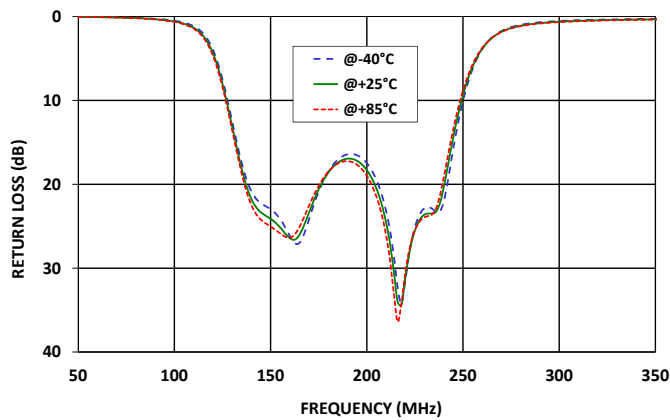
ZX75BP-188-S+
INSERTION LOSS



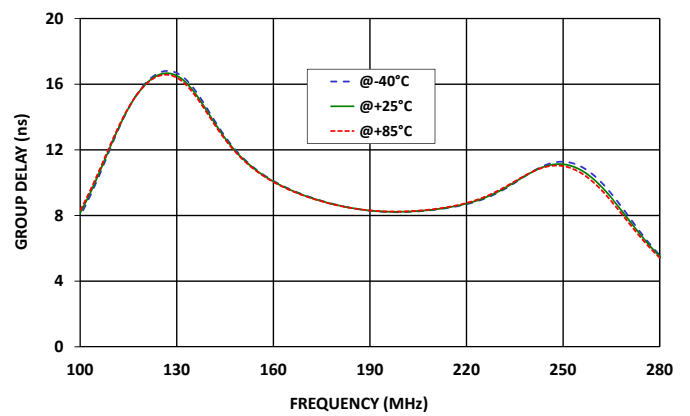
ZX75BP-188-S+
INSERTION LOSS (Zoomed)



ZX75BP-188-S+
RETURN LOSS



ZX75BP-188-S+
GROUP DELAY





Bandpass Filter

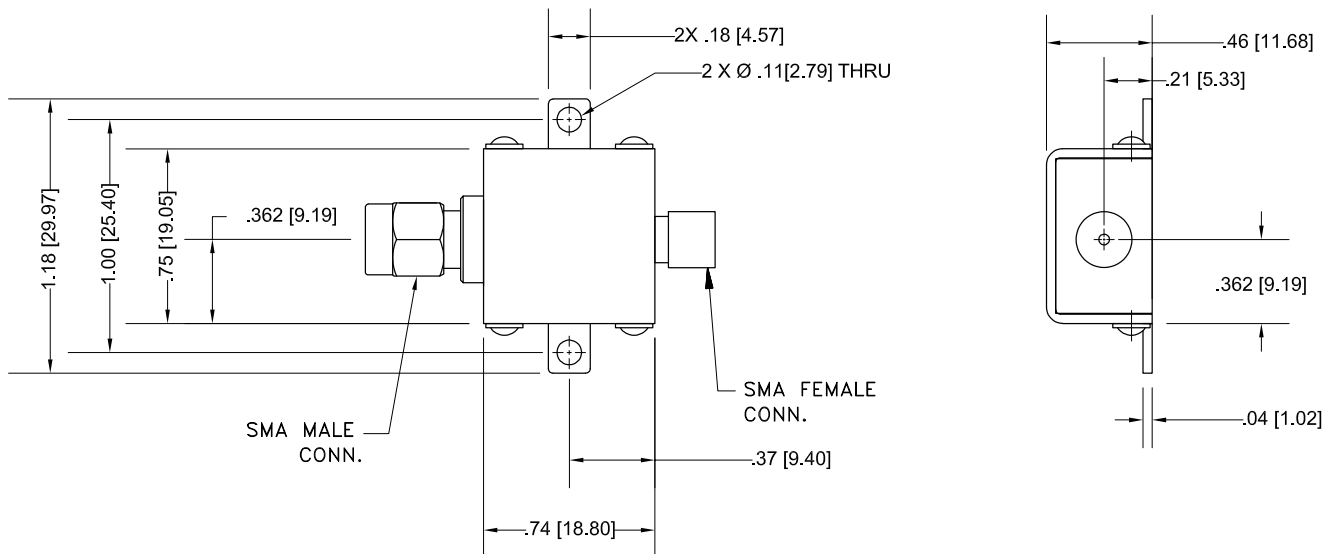
ZX75BP-188-S+

50 Ω 138 to 238 MHz SMA-Male to SMA-Female

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. $\pm$.03; 3Pl. $\pm$.015****Tolerance on hole size and interaxes dimensions to be $\pm$.005.****PRODUCT MARKING*:** ZX75BP-188-S+

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



Mini-Circuits

LUMPED LC COAXIAL

Bandpass Filter

ZX75BP-188-S+

50Ω 138 to 238 MHz SMA-Male to 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	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



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Mini-Circuits:](#)

[ZX75BP-188-S+](#)