



Diplexer

ZX75-2150-S+

50Ω DC to 2150 MHz (DC-125, 950-2150 MHz) SMA Female

KEY FEATURES

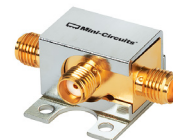
- Low Insertion Loss, 0.3 dB Typ.
- High Rejection, 70 dB Typ.
- Combination of Low Pass and High Pass Filters

APPLICATIONS

- Satellite
- L Band

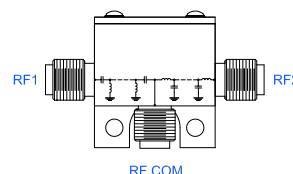
PRODUCT OVERVIEW

Mini-Circuits' ZX75-2150-S+ is a low pass + high pass combination device. Low pass port is designed for DC to 125 MHz and high pass port is designed for 950 to 2150 MHz. This shielded case package provides very low passband insertion loss and excellent co-channel rejection which makes this suitable for high performance applications like Satellite and L Band.



Generic photo used for illustration purposes only

FUNCTIONAL DIAGRAM



ELECTRICAL SPECIFICATIONS AT +25°C

Parameter		Function (Port)	Frequency (MHz)	Min.	Typ.	Max.	Unit
Passband	Insertion Loss	Low Pass (RF COM-RF1)	DC - 125	—	0.7	1.0	dB
		High Pass (RF COM-RF2)	950 - 2150	—	0.3	1.0	
	Return Loss	Low Pass (RF1)	DC - 125	15	20	—	dB
		High Pass (RF2)	950 - 2150	—	20	—	
		Common (RF COM)	DC - 125	15	20	—	
			950 - 2150	—	20	—	
Stopband Rejection		Low Pass (RF COM-RF1)	200 - 1300	20	27	—	dB
			1300 - 2500	50	60	—	
		High Pass (RF COM-RF2)	DC - 125	60	70	—	
			125 - 280	20	30	—	

ABSOLUTE MAXIMUM RATINGS¹

Parameter	Ratings
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +125°C
Input Power (RF COM) ²	1W
Input Power (RF1) ²	1W
Input Power (RF2) ²	1W

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

2. Power rating applies only to signals within the passband.



LUMPED LC COAXIAL

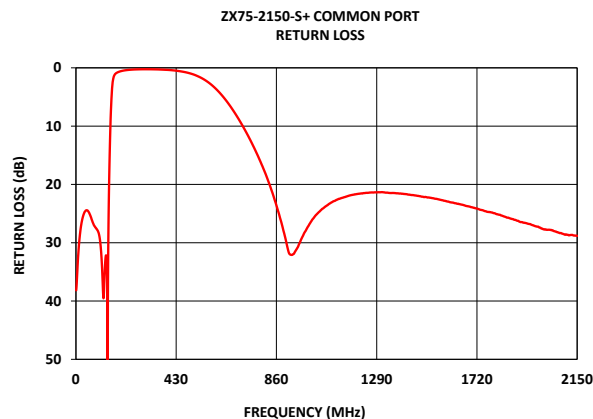
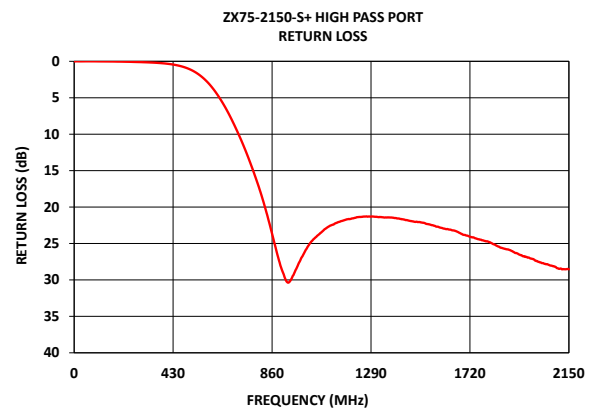
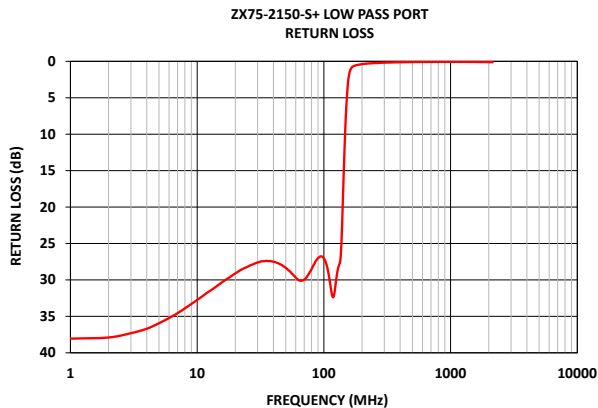
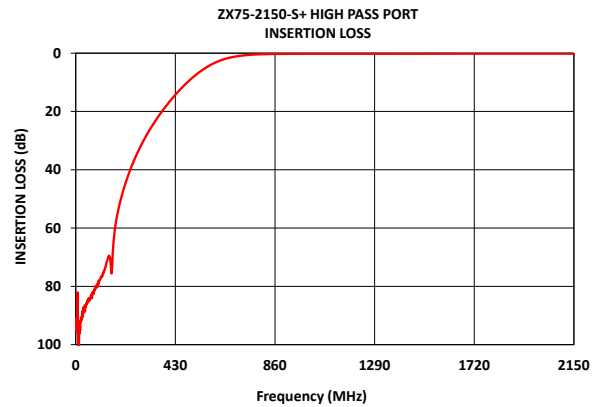
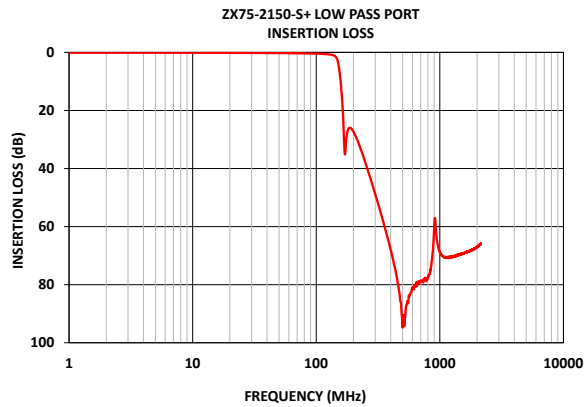
Diplexer

ZX75-2150-S+

Mini-Circuits

50Ω DC to 2150 MHz (DC-125, 950-2150 MHz) SMA Female

TYPICAL PERFORMANCE GRAPHS AT +25°C



Mini-Circuits



LUMPED LC COAXIAL

Diplexer

ZX75-2150-S+

Mini-Circuits

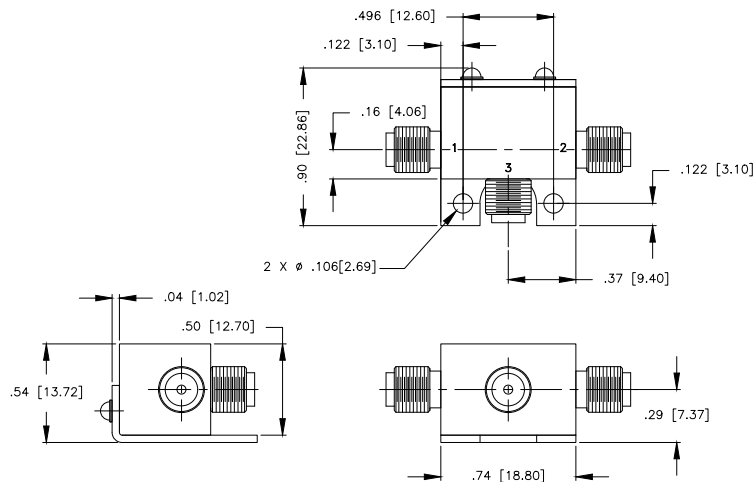
50Ω DC to 2150 MHz (DC-125, 950-2150 MHz) SMA Female

CONNECTOR DESCRIPTION

Function	Marking on Unit	Connector
RF COM ³	3	SMA Female
RF1 ³	2	SMA Female
RF2 ³	1	SMA Female

3. RF1, RF2, RF COM can be used as input / output. See S-Parameters for actual performance.

CASE STYLE DRAWING



Weight: 20.0 gram

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

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

PRODUCT MARKING*: ZX75-2150-S+

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





Mini-Circuits

LUMPED LC COAXIAL

Diplexer

ZX75-2150-S+

50Ω DC to 2150 MHz (DC-125, 950-2150 MHz) SMA Female

ADDITIONAL INFORMATION IS AVAILABLE ON OUR DASHBOARD

[CLICK HERE](#)

Performance Data & Graphs	Data
	Graphs
	S-Parameter (S3P Files) Data Set (.zip file)
Case Style	FL905
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

