

ZX75BP-2150-S+ Datasheet



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DiGi Electronics Part Number	ZX75BP-2150-S+-DG
Manufacturer	Mini-Circuits
Manufacturer Product Number	ZX75BP-2150-S+
Description	RF FILT BAND PASS 2.15GHZ INLINE
Detailed Description	2.15GHz Center Frequency Band Pass RF Filter (Radio Frequency) 200MHz Bandwidth 2dB Inline, SMA Connection, F and M

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Purchase and inquiry

Manufacturer Product Number:

ZX75BP-2150-S+

Series:

ZX75BP

Frequency:

2.15GHz Center

Filter Type:

Band Pass

Insertion Loss:

2dB

Package / Case:

Inline, SMA Connection, F and M

Height (Max):

0.490" (12.45mm)

Manufacturer:

Mini-Circuits

Product Status:

Active

Bandwidth:

200MHz

Ripple:

-

Mounting Type:

Free Hanging (In-Line)

Size / Dimension:

0.740" L x 0.750" W (18.80mm x 19.05mm)

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

Vendor Undefined

HTSUS:

8548.00.0000

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

EAR99

Coaxial Bandpass Filter

ZX75BP-2150-S+

50Ω 2050 to 2250 MHz

The Big Deal

- Fast roll-off on the upper sideband
- Good Matching and low loss in the pass band
- Connectorized package



Generic photo used for illustration purposes only
CASE STYLE: KE1467

Product Overview

ZX75BP-2150-S+ is a wideband bandpass filter in a rugged connectorized package covering 2050 to 2250 MHz. This is designed for asymmetric rejection applications such as super-heterodyne receivers. By having asymmetric band, faster roll-off at upper side band is achieved in a comparatively smaller package and lower pass band insertion loss. It has repeatable performance across lots and consistent performance across temperature

Key Features

Feature	Advantages
Fast roll-off on the upper side band	Wide bandwidth filter with fast-roll off on the upper side band, which increases selectivity on the adjacent channel.
Good matching and low loss in pass band	This filter has good matching and low loss in the pass band
Connectorized package	Connectorized package is easy to interface with other devices and well suited for test setups.
High power handling	This model uses high Q capacitors and high current handling inductors which is well suited for high power applications.

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-Circuit's 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/MCLStore/terms.jsp



Coaxial

Bandpass Filter

ZX75BP-2150-S+

50Ω 2050 to 2250 MHz



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CASE STYLE: KE1467

Connectors	Model
SMA-MF	ZX75BP-2150-S+

Features

- Fast roll-off on the upper side band
- Good matching in the pass band
- Connectorized package

Applications

- Defense systems
- Fixed microwave
- IMT
- Auxiliary broadcasting
- Private and public land mobile

Electrical Specifications at 25°C

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Center Frequency	-	-	2150	-	MHz
	Insertion Loss	F1-F2	2050-2250	0.8	2.0	dB
	VSWR	F1-F2	2050-2250	1.3	1.78	:1
Stop Band, Lower	Insertion Loss	DC-F3	DC - 600	29	-	dB
	VSWR	DC-F3	DC - 600	20	-	:1
Stop Band, Upper	Insertion Loss	F4-F5	2720-4500	29	-	dB
	VSWR	F4-F5	2720-4500	20	-	:1

Maximum Ratings

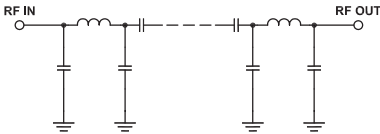
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	6.3 W max.

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

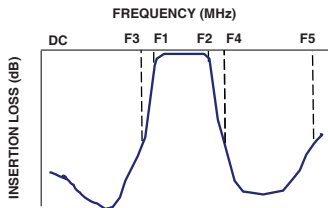
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	85.06	1737.18	2050	1.43
50	51.32	1737.18	2060	1.43
525	31.10	347.44	2070	1.43
600	29.95	289.53	2080	1.43
1250	20.93	86.86	2090	1.43
1500	15.46	52.65	2100	1.44
1725	7.90	15.39	2110	1.44
1850	3.09	4.62	2120	1.45
1900	1.73	2.79	2130	1.46
2050	0.55	1.15	2140	1.48
2150	0.58	1.08	2150	1.49
2250	0.76	1.14	2160	1.51
2310	1.57	1.98	2170	1.53
2350	3.30	3.70	2180	1.55
2400	7.07	8.77	2200	1.61
2500	16.02	28.03	2210	1.64
2560	20.97	39.49	2220	1.69
2720	32.37	59.91	2230	1.73
3500	60.08	124.09	2240	1.78
4500	55.33	133.63	2250	1.84

Functional Schematic

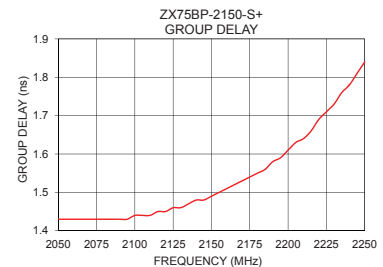
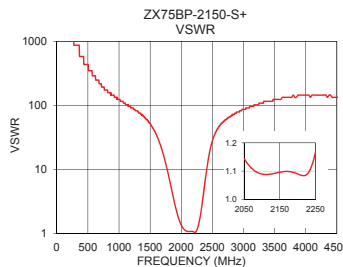
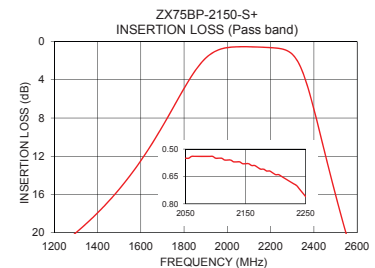
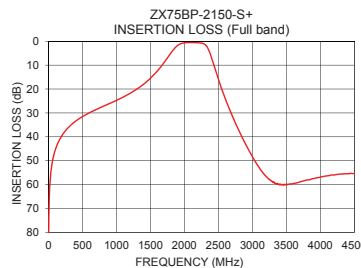


Typical Frequency Response



+RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications



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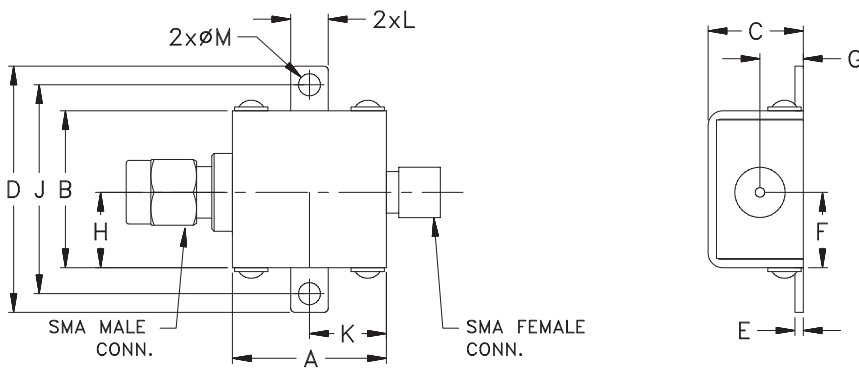
Bandpass Filter

ZX75BP-2150-S+

Coaxial Connections

INPUT	SMA-MALE
OUTPUT	SMA-FEMALE

Outline Drawing



Outline Dimensions ($\frac{\text{inch}}{\text{mm}}$)

A	B	C	D	E	F	G
.74	.75	.46	1.18	.04	.362	.21
18.80	19.05	11.68	29.97	1.02	9.19	5.33
H	J	K	L	M		Wt.
.362	1.00	.37	.18	.11		grams
9.19	25.40	9.40	4.57	2.79		24.4

Note: Please refer to case style drawing for details

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