Coaxial

Diplexer

ZDPLX-2150+

50Ω DC-2150 MHz (DC-10, 50-2150 MHz)

CASE STYLE: FL905

The Big Deal

- Low insertion loss
- High Rejection
- Connectorized package

Product Overview

ZDPLX-2150+ is a low-pass + high-pass combination device. Low pass port is designed for DC to 10 MHz and high pass port is designed for 50 to 2150 MHz. This diplexer is used in satellite, CATV, set-top box, modem, video equipment and multiband radio systems.

Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application.
Extended stopband rejection	Spurious rejection and eliminates usage of additional filtering
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups.

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ZDPLX-2150+

50Ω DC to 2150 MHz (DC-10, 50-2150 MHz)

CASE STYLE: FL905

Connectors	Model	Price	Qty.
SMA	ZDPLX-2150-S+	$39.95	(1-9)

+RoHS Compliant

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

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Voltage at DC Port	25V max.
Input Current	100 mA
RF Power Input	400 mW

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

Features

- Low insertion loss
- 50Ω Impedance
- Combination of low pass and high pass filters
- Connectorized package

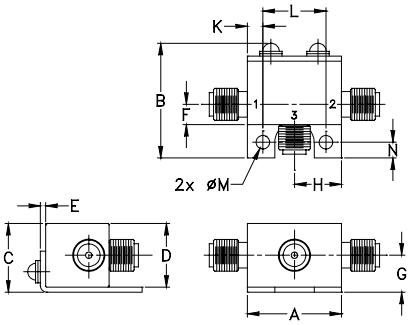
Applications

- Set-top box
- Satellite
- CATV

Coaxial Connections

HIGH PASS PORT	1
LOW PASS PORT	2
COMMON PORT	3

Outline Drawing



Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
.74	.90	.54	.50	.04	.16	.29
18.80	22.86	13.72	12.70	1.02	4.06	7.37

H	J	K	L	M	N	wt
.37	--	.122	.496	.106	.122	grams
9.40	--	3.10	12.60	2.69	3.10	20.0

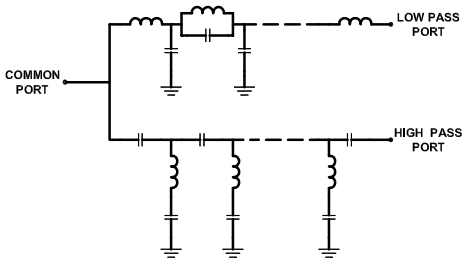
Electrical Specifications at 25°C

Parameter		Port	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	Low Pass	DC-10	-	0.5	1	dB
		High Pass	50-2150	-	0.9	1.5	
	Return Loss	Low Pass	DC-10	16	29	-	dB
		High Pass	50-2150	12	16	-	
		Common	DC-10	16	23	-	
			50-2150	12	20	-	
Stop Band Isolation		Low Pass	40-2200	20	31	-	dB
			50-2150	30	44	-	
		High Pass	DC-18	20	33	-	dB
			DC-10	30	61	-	

Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)		
	Low Pass Port	High Pass Port	Common Port	Low Pass Port	High Pass Port
1	0.31	107.59	28.63	28.90	0.00
10	0.45	61.63	26.43	33.04	0.12
18	0.79	32.85	22.37	20.33	0.58
23	1.77	21.71	10.45	9.59	1.64
26	3.43	14.34	7.69	5.97	3.94
29	8.90	4.15	11.57	2.26	15.11
34	20.66	1.43	19.41	0.70	17.65
40	30.59	0.87	22.62	0.45	21.32
50	44.17	0.53	29.02	0.30	25.28
60	57.24	0.39	32.45	0.23	24.73
410	63.29	0.07	43.25	0.03	41.67
1300	55.33	0.14	28.45	0.06	30.12
1700	58.07	0.24	23.36	0.28	26.32
2150	55.85	0.77	29.25	0.13	18.05
2200	55.52	0.55	25.33	0.14	19.61

Functional Schematic



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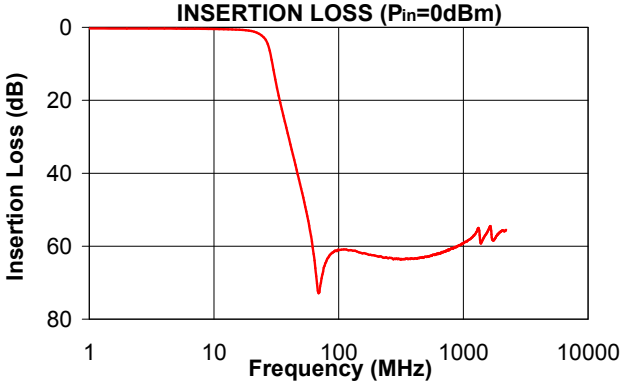
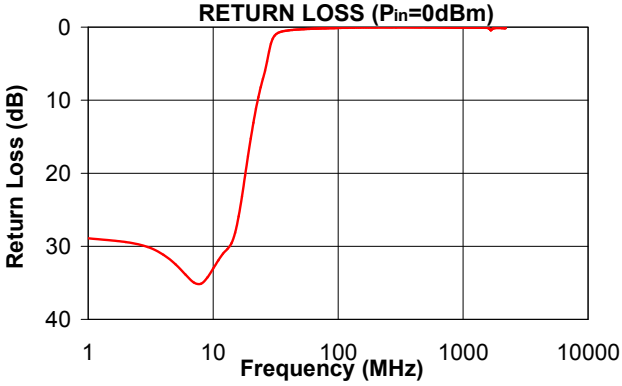
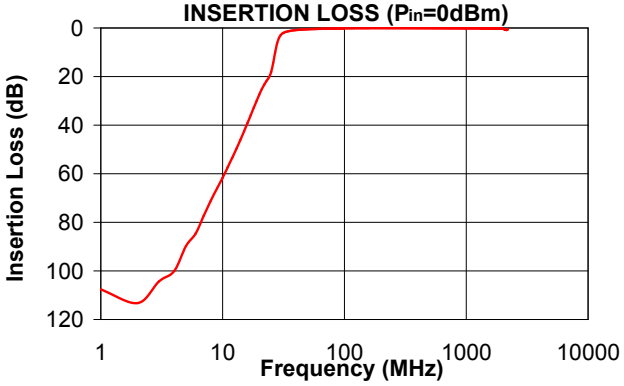
ZDPLX-2150+ LOW PASS PORT
INSERTION LOSS (P_{in}=0dBm)



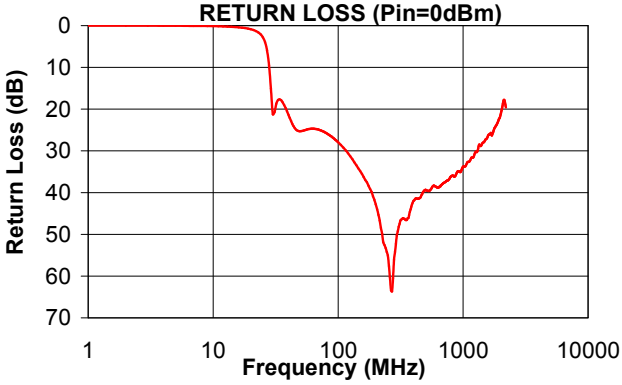
ZDPLX-2150+ LOW PASS PORT
RETURN LOSS (P_{in}=0dBm)



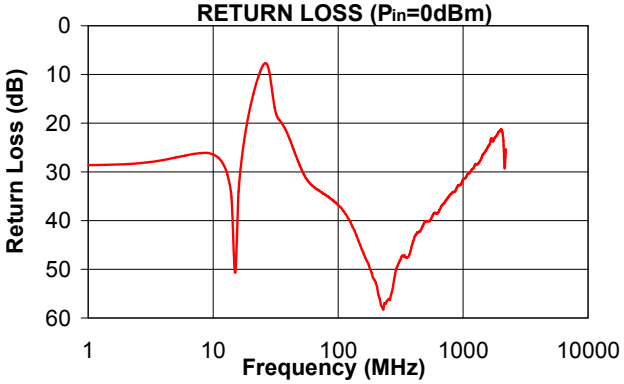
ZDPLX-2150+ HIGH PASS PORT
INSERTION LOSS (P_{in}=0dBm)



ZDPLX-2150+ HIGH PASS PORT
RETURN LOSS (Pin=0dBm)



ZDPLX-2150+ COMMON PORT
RETURN LOSS (P_{in}=0dBm)



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