Coaxial

Low Pass Filter

ZX75LP-264+

50Ω   DC to 264 MHz

CASE STYLE: KE1467

The Big Deal

- High rejection
- Low Insertion loss, 1.1 dB typical in passband
- Fast roll-off
- Good VSWR
- Connectorized package

Product Overview

ZX75LP-264+ is a 50Ω low pass filter built in a connectorized package. Covering DC-264 MHz bandwidth, these units offer good matching within the passband and high rejection in stopband. This will find its applications in receivers and transmitters to suppress spurious emission and harmonics. It also finds application in ADC/DAC filtering and clock circuitry. It has repeatable performance across production lots and consistent performance across temperature.

Key Features

Feature	Advantages
Low passband insertion loss	Suitable for high performance application
Fast roll-off	Provides very good adjacent band rejection
Connectorized package	The connectorized package is easy to interface with other devices and well suited for test setups
Good VSWR	Provides good interface when used with other devices.

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Connectors	Model
SMA-M\F	ZX75LP-264-S+

Features

- High rejection
- Low Insertion loss
- Fast roll-off
- Good VSWR
- Connectorized package

Applications

- ADC/DAC
- Clock circuitry
- Satellite
- Wireless communications
- Receivers / Transmitters

Electrical Specifications at 25°C

Parameter		F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-264	—	1.1	2.0	dB
	Freq. Cut-Off	F2	288	—	3.0	—	dB
	VSWR	DC-F1	DC-264	—	1.4	1.8	:1
Stop Band	Rejection Loss	F3-F4	365-1500	20	30	—	dB
	VSWR	F3-F4	365-1500	—	37	—	:1

Functional Schematic

Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

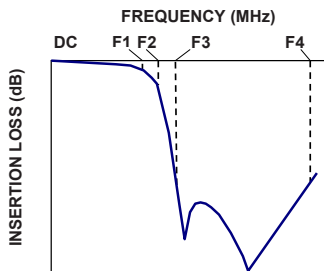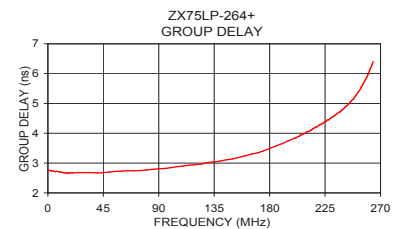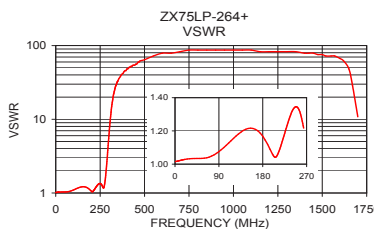Permanent damage may occur if any of these limits are exceeded.
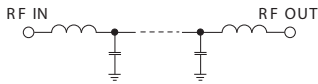
Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)	Frequency (MHz)	Group Delay (nsec)
1	0.07	1.02	1	2.76
35	0.14	1.03	5	2.73
85	0.24	1.07	25	2.68
190	0.51	1.12	50	2.70
264	1.05	1.22	75	2.75
288	2.96	2.66	100	2.85
300	6.51	6.32	110	2.90
315	12.44	14.87	120	2.95
350	25.90	33.42	130	3.02
365	31.16	38.61	140	3.07
400	43.03	48.26	150	3.14
450	59.63	56.04	160	3.24
475	69.45	62.05	170	3.34
500	75.77	64.35	180	3.49
600	78.27	78.97	200	3.83
750	78.21	86.86	230	4.52
1000	73.82	86.86	240	4.82
1200	69.83	82.73	250	5.27
1300	70.23	82.73	260	5.98
1500	69.24	75.53	264	6.40

Typical Frequency Response

ZX75LP-264+
INSERTION LOSS (Full band)

ZX75LP-264+
INSERTION LOSS (Passband)
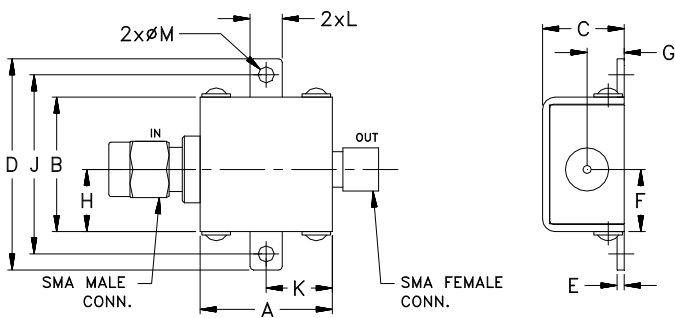

ZX75LP-264+
VSWR

ZX75LP-264+
GROUP DELAY
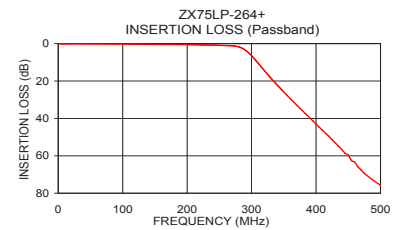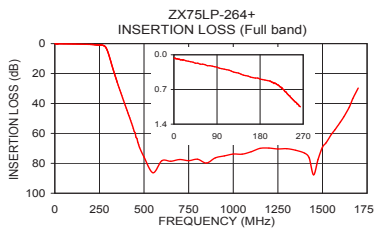
Notes

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Coaxial Connections

INPUT	SMA-Male
OUTPUT	SMA-Female

Outline Drawing

Outline Dimensions (inch / mm)

A	B	C	D	E	F	G
0.74	.75	.46	1.18	.04	.349	.21
18.80	19.05	11.68	29.97	1.02	8.86	5.33

H	J	K	L	M		wt
.349	1.00	.37	.18	.09		grams
8.86	25.40	9.40	4.57	2.29		24.4

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