

# Low Pass Filter

## SXLP-8.4+

50Ω DC to 8.4 MHz

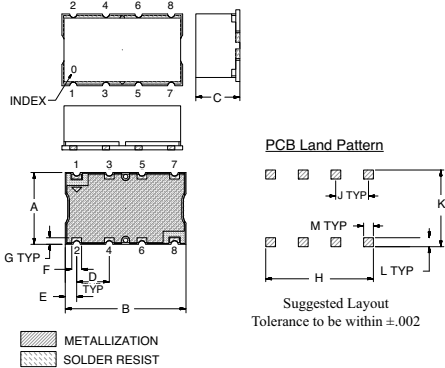
### Maximum Ratings

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

### Pin Connections

INPUT	1
OUTPUT	8
GROUND	2, 3, 4, 5, 6, 7

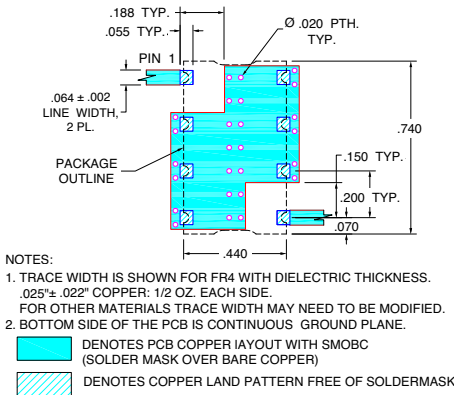
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.440	.740	.270	.200	0.70	0.60	
11.18	18.80	6.86	5.08	1.78	1.52	
G	H	J	K	L	M	wt. grams
.040	.660	.200	.470	.055	.060	
1.02	16.76	5.08	11.94	1.40	1.52	3.0

### Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)

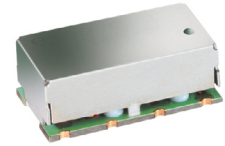


### Features

- High rejection
- Sharp cut-off
- Shielded package
- Aqueous washable
- Low cost

### Applications

- Defense communications
- Receivers / Transmitters
- Harmonic rejection



CASE STYLE: HF1139  
PRICE: \$ 8.95 ea. QTY (1-9)

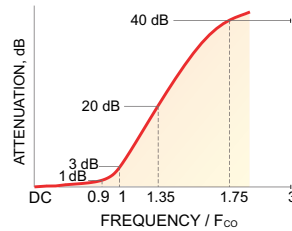
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

The +Suffix has been added in order to identify RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications.

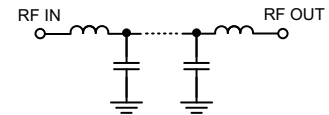
### Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 8.4	9.4	11.6 - 13	13 - 400	1.25	18

### Typical Frequency Response

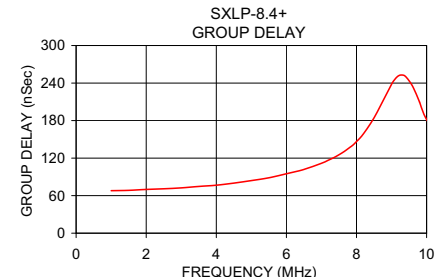
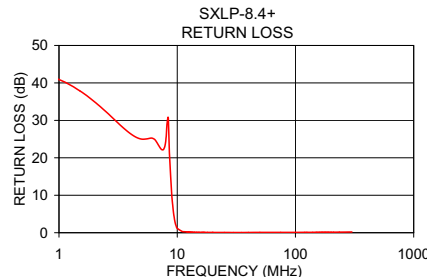
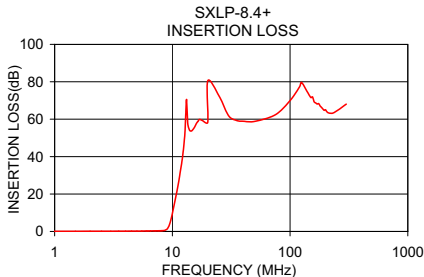


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
0.5	0.08	0.00	43.92	0.5	66.20
1.0	0.08	0.01	40.89	1.5	68.51
5.0	0.18	0.02	24.99	2.0	69.97
8.4	0.48	0.01	30.66	2.5	70.93
9.0	1.17	0.10	10.04	3.0	72.45
9.4	3.25	0.23	4.32	3.5	74.75
10.0	9.71	0.30	1.18	4.0	76.71
11.6	31.17	0.26	0.26	4.5	80.03
13.0	62.31	1.80	0.17	5.0	84.05
15.0	55.18	2.12	0.11	5.5	88.57
20.0	59.65	7.30	0.08	6.2	97.57
50.0	58.73	0.34	0.08	6.5	101.85
75.0	62.37	0.58	0.08	7.0	111.74
100.0	68.95	1.08	0.09	7.2	116.73
120.0	76.07	2.22	0.10	7.6	128.85
150.0	71.23	0.82	0.11	7.7	132.53
200.0	64.48	0.72	0.14	8.0	146.47
235.0	62.91	0.70	0.15	8.4	175.22
300.0	67.91	0.63	0.18	9.4	250.50
330.0	49.96	0.93	0.21	9.6	234.82
400.0	61.70	0.55	0.24	10.0	181.83



P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 For detailed performance specs & shopping online see Mini-Circuits web site



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RF/IF MICROWAVE COMPONENTS

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