

# Low Pass Filter

## SXLP-8-75+

75Ω DC to 8 MHz

### Maximum Ratings

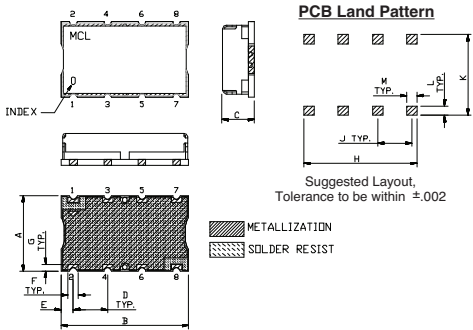
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

### Pin Connections

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

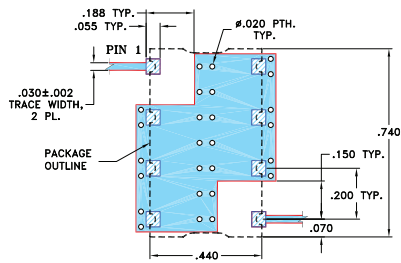
### Outline Drawing



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	
.44	.74	.27	.200	.07	.060	
11.18	18.80	6.86	5.08	1.78	1.52	
G	H	J	K	L	M	wt.
.040	.660	.200	.470	.055	.060	grams
1.02	16.76	5.08	11.94	1.40	1.52	3.0

### Demo Board MCL P/N: TB-466+ Suggested PCB Layout (PL-281)



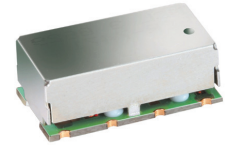
- NOTE:
- TRACE WIDTH IS SHOWN FOR ROGERS R04350B WITH DIELECTRIC THICKNESS .030"±.002". COPPER: 1/2 OZ. EACH SIDE.  
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
  - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- 

### Features

- high rejection
- sharp cut-off
- shielded package
- aqueous washable
- low cost

### Applications

- radio
- test equipments
- receivers / transmitters
- harmonic rejection



CASE STYLE: HF1139  
PRICE: \$12.95 ea. QTY (1-9)

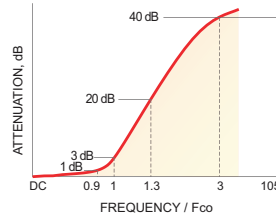
**+ RoHS compliant in accordance with EU Directive (2002/95/EC)**

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

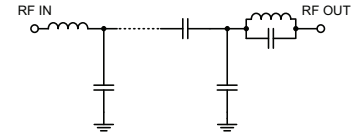
### Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 8	9.5	12.5 - 27	27 - 1000	1.2	18

### Typical Frequency Response

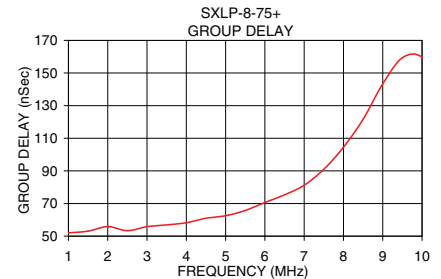
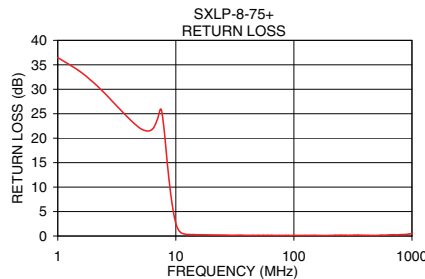
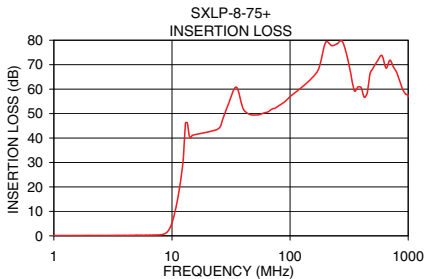


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
1.0	0.13	0.00	36.47	1.0	51.99
2.5	0.15	0.00	29.19	1.5	53.09
5.0	0.26	0.01	22.00	2.0	55.86
6.0	0.26	0.01	21.51	2.5	53.34
8.0	0.44	0.05	21.26	3.0	55.83
8.5	0.69	0.10	14.48	3.5	56.89
9.0	1.33	0.19	9.11	4.0	58.22
9.5	2.78	0.35	5.15	4.5	60.98
10.0	5.33	0.51	2.63	5.0	62.51
11.0	13.44	0.79	0.73	5.5	65.77
12.0	24.60	1.10	0.39	6.0	70.63
12.5	32.30	1.53	0.32	6.5	75.33
20.0	42.43	0.87	0.23	7.0	81.20
27.0	47.93	1.05	0.18	7.5	91.01
50.0	49.41	0.44	0.15	8.0	104.55
100.0	56.95	0.73	0.13	8.5	121.68
250.0	78.55	2.53	0.17	9.0	143.30
500.0	68.27	5.34	0.12	9.5	159.33
1000.0	57.44	1.91	0.46	10.0	159.63



For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661 The Design Engineers Search Engine Provides ACTUAL Data Instantly at [minicircuits.com](http://minicircuits.com)

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuit's applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet 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](http://www.minicircuits.com/MCLStore/terms.jsp).

REV. OR  
M121548  
EDR-9158/1U  
SXLP-8-75+  
URJ/RAV  
110821  
Page 1 of 1