

Low Pass Filter

SXLP-8+

50Ω DC to 8 MHz

Maximum Ratings

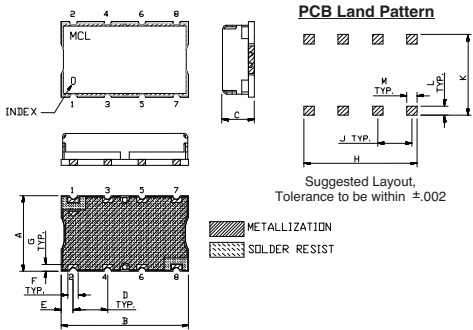
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

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

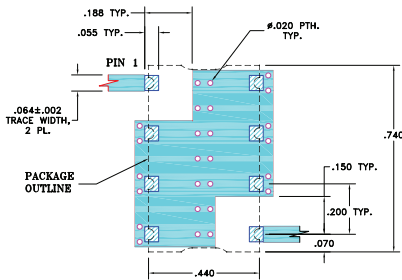
Outline Drawing



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-368 Suggested PCB Layout (PL-230)



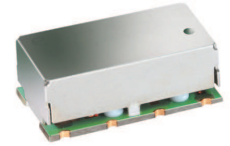
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



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

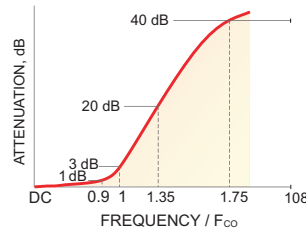
+RoHS Compliant

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

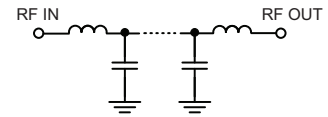
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 8	9.2	12.5 - 16.5	16.5 - 1000	1.7	18

Typical Frequency Response

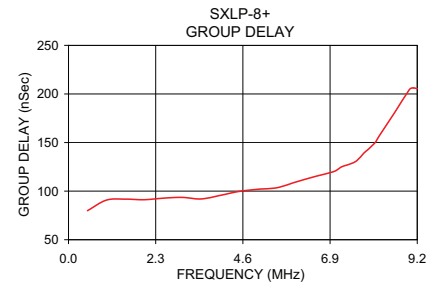
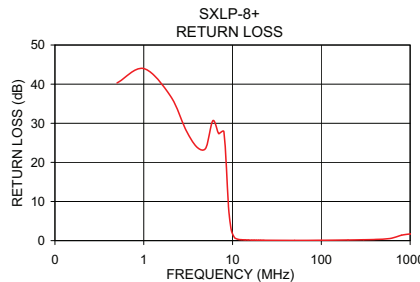
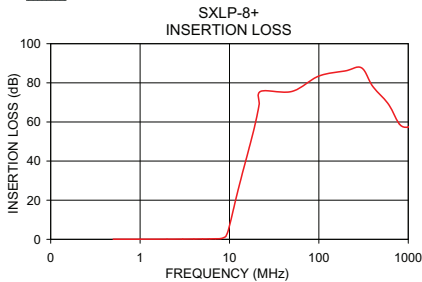


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
0.5	0.06	0.00	40.31	0.5	79.92
2.6	0.12	0.01	31.02	2.0	91.19
5.4	0.24	0.01	25.18	2.5	92.76
8.0	0.39	0.02	27.83	3.0	93.55
8.8	0.81	0.12	11.54	3.5	91.93
9.2	1.77	0.32	6.29	4.0	95.65
9.5	3.15	0.50	3.80	4.5	99.70
10.0	6.61	0.65	1.64	5.0	101.97
10.8	13.16	0.63	0.58	5.5	103.46
12.5	25.40	0.56	0.24	6.0	109.39
16.5	46.36	0.91	0.14	7.0	120.18
30.0	73.63	6.96	0.08	7.4	127.53
50.0	74.71	4.84	0.07	7.6	131.20
100.0	79.98	4.41	0.10	7.8	139.44
200.0	83.65	3.30	0.16	8.0	146.44
400.0	76.92	1.37	0.30	8.2	156.94
600.0	71.35	2.38	0.56	8.6	180.69
800.0	63.32	4.82	1.39	9.0	204.83
1000.0	60.15	2.66	1.71	9.2	205.46



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

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.

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