

Surface Mount Low Pass Filter

SXLP-8-75+

75Ω DC to 8 MHz

Maximum Ratings

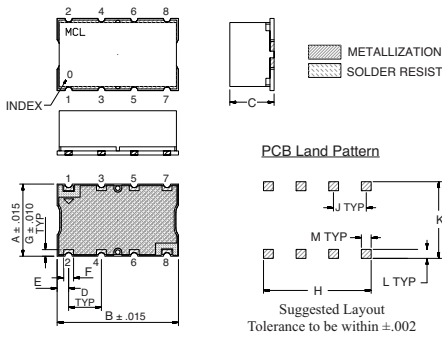
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

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

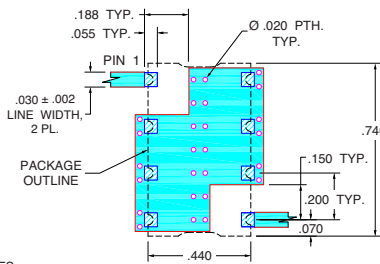
Outline Drawing



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	wt.
												grams
.440	.740	.27	.200	.07	.060	.040	.660	.200	.470	.055	.060	3.0
11.18	18.80	6.86	5.08	1.78	1.52	1.02	16.76	5.08	11.94	1.40	1.52	

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



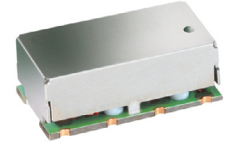
- TRACE WIDTH IS SHOWN FOR RO4350B WITH DIELECTRIC THICKNESS: .030±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

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

Applications

- Radio
- Test Equipment
- Receivers / Transmitters
- Harmonic rejection



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

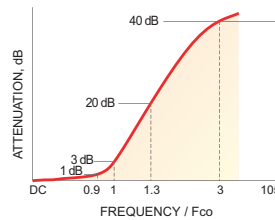
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

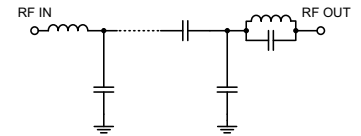
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
(Loss < 1dB)	(Loss 3dB)	12.5 - 27	27 - 1000	1.2	18
DC - 8	9.5				

Typical Frequency Response

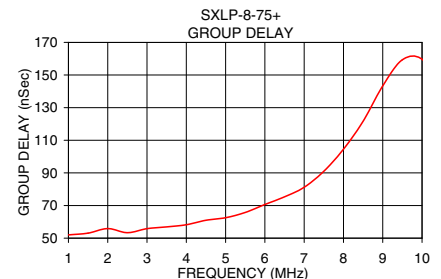
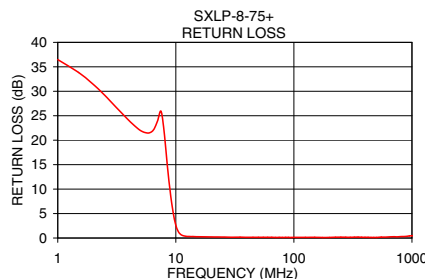
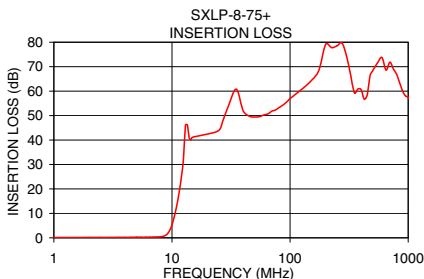


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
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



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