

Low Pass Filter

SXLP-1000+

50Ω DC to 1000 MHz

Maximum Ratings

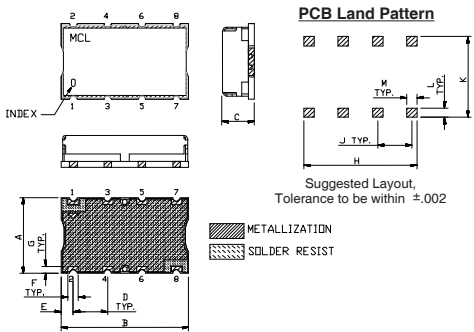
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

Pin Connections

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

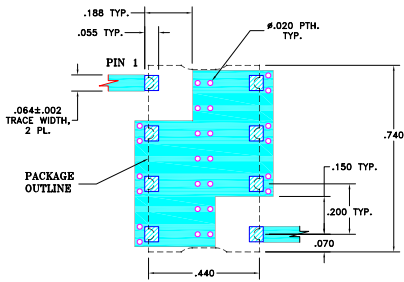
Outline Drawing



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

Note: Please refer to case style drawing for details
Demo Board MCL P/N: TB-368
Suggested PCB Layout (PL-230)

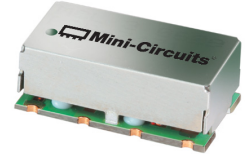


Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



Generic photo used for illustration purposes only
 CASE STYLE: HF1139

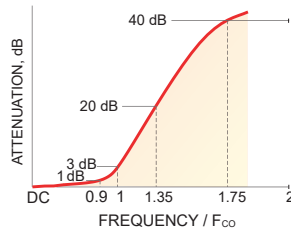
+RoHS Compliant

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

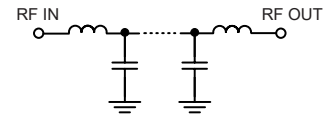
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 1000	1200	1620 - 2100	2100 - 2500	1.7	18

Typical Frequency Response

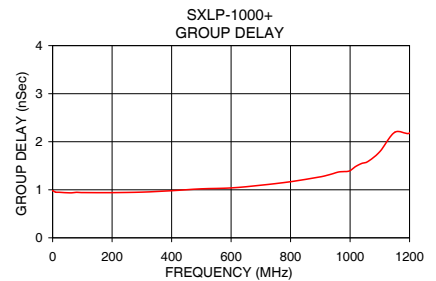
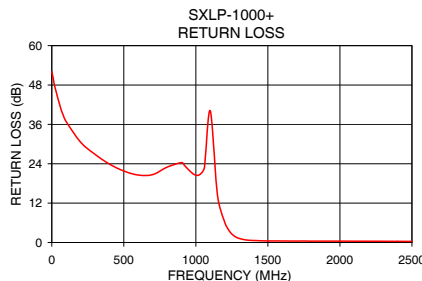
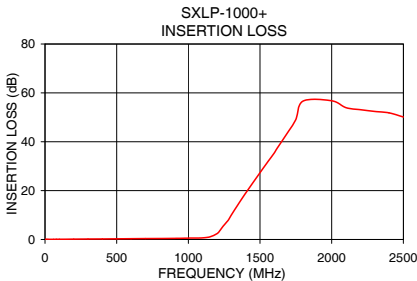


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
1.0	0.02	0.00	51.87	1.0	0.98
60.0	0.06	0.01	41.15	20.0	0.95
200.0	0.14	0.00	30.59	60.0	0.94
500.0	0.27	0.00	21.78	80.0	0.95
800.0	0.39	0.01	22.95	100.0	0.94
1000.0	0.55	0.02	20.52	200.0	0.94
1150.0	0.83	0.14	14.41	300.0	0.95
1200.0	1.67	0.43	6.23	400.0	0.98
1240.0	3.87	0.83	3.05	500.0	1.02
1280.0	6.44	1.00	1.61	600.0	1.04
1350.0	12.86	1.10	0.77	700.0	1.09
1400.0	17.21	1.11	0.60	800.0	1.17
1500.0	25.53	1.12	0.48	900.0	1.27
1620.0	35.31	1.27	0.45	920.0	1.30
1750.0	46.05	1.83	0.45	940.0	1.33
1800.0	52.31	2.67	0.42	960.0	1.37
2000.0	58.20	1.39	0.42	980.0	1.38
2100.0	55.05	1.00	0.39	1000.0	1.40
2300.0	52.86	0.67	0.37	1100.0	1.79
2500.0	50.63	0.42	0.33	1200.0	2.18



Notes

- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.
- Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.
- The parts covered by this specification document 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

