

# Low Pass Filter

# SXLP-380+

50Ω DC to 380 MHz

## Maximum Ratings

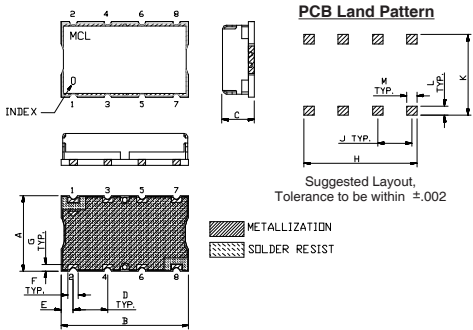
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

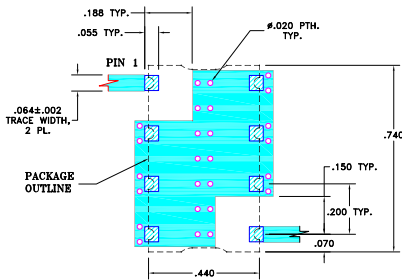


## Outline Dimensions (inch/mm)

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)**

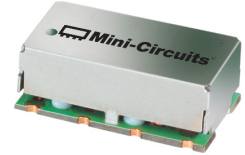


## Features

- 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

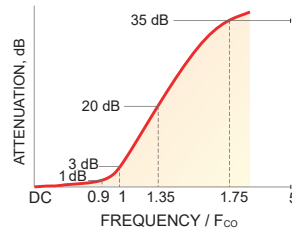
## +RoHS Compliant

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

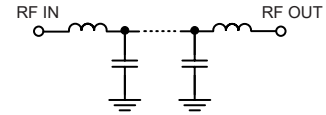
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 35dB)	Passband Typ.	Stopband Typ.
DC - 380	440	580 - 750	750 - 2200	1.3	18

## Typical Frequency Response

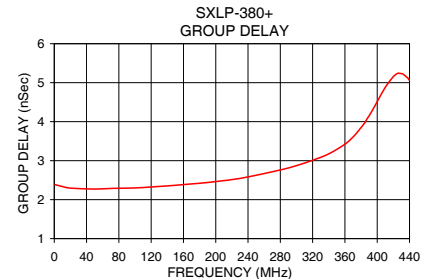
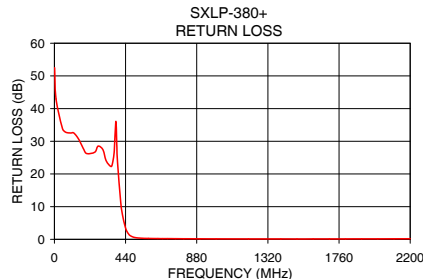
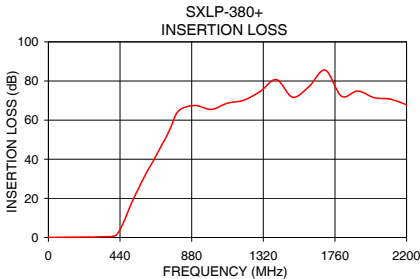


## Functional Schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
1.0	0.02	0.01	52.50	1.0	2.38
10.0	0.05	0.01	42.94	10.0	2.34
50.0	0.08	0.01	33.85	20.0	2.30
100.0	0.12	0.01	32.54	50.0	2.27
300.0	0.28	0.01	27.42	70.0	2.29
380.0	0.47	0.02	36.10	100.0	2.30
410.0	0.74	0.09	11.33	120.0	2.33
420.0	1.15	0.19	7.78	140.0	2.35
440.0	3.25	0.42	3.44	160.0	2.39
460.0	6.77	0.49	1.55	180.0	2.42
500.0	15.18	0.45	0.54	200.0	2.46
580.0	29.49	0.42	0.28	220.0	2.51
750.0	54.77	2.27	0.19	240.0	2.58
900.0	67.61	2.84	0.16	280.0	2.76
1000.0	67.09	2.24	0.13	300.0	2.87
1200.0	71.02	2.58	0.12	340.0	3.18
1500.0	68.08	4.29	0.10	380.0	3.85
2000.0	66.96	6.58	0.14	400.0	4.51
2100.0	64.85	4.98	0.16	420.0	5.16
2200.0	64.12	5.39	0.18	440.0	5.06



## 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](http://www.minicircuits.com/MCLStore/terms.jsp)



[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com