

# Low Pass Filter

# SXLP-44+

50Ω DC to 44 MHz

## Maximum Ratings

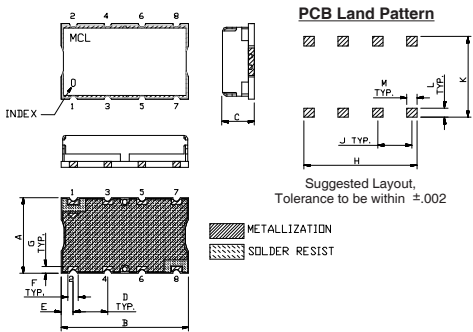
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

## Pin Connections

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

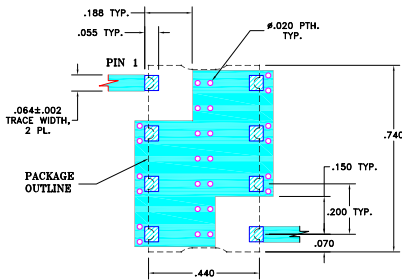
## Outline Drawing



## 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. grams
.040	.660	.200	.470	.055	.060	3.0
1.02	16.76	5.08	11.94	1.40	1.52	

## Demo Board MCL P/N: TB-368 Suggested PCB Layout (PL-230)

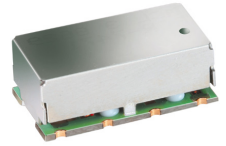


## Features

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

## Applications

- defense communications
- receivers / transmitters
- harmonic rejection



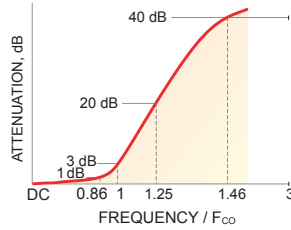
CASE STYLE: HF1139

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

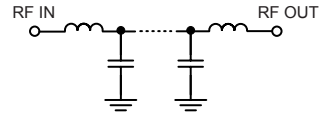
## Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 44	48.5	59 - 65.5	65.5 - 600	1.4	18

## Typical Frequency Response

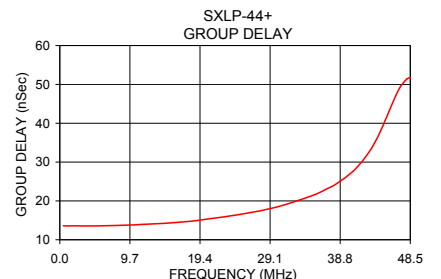
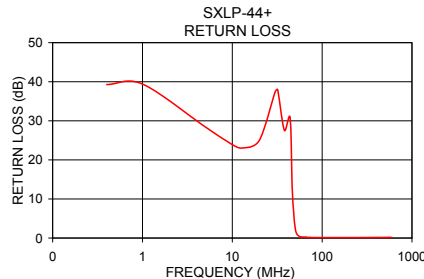
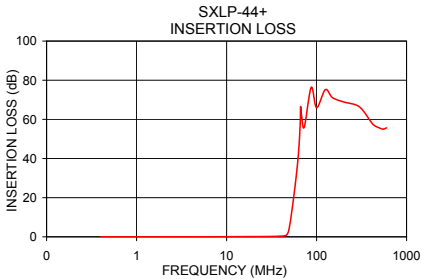


## Functional Schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
0.5	0.01	0.00	39.49	0.5	13.62
3.0	0.02	0.00	31.76	2.0	13.58
6.0	0.04	0.00	26.26	10.0	13.81
11.0	0.08	0.00	22.64	11.0	13.91
28.0	0.16	0.00	33.83	12.0	14.00
39.0	0.33	0.01	27.35	13.0	14.11
44.0	0.50	0.01	25.73	14.0	14.18
46.8	1.19	0.07	9.72	15.0	14.30
48.5	2.84	0.14	4.73	18.0	14.76
49.0	3.61	0.15	3.75	20.0	15.22
52.0	10.59	0.22	1.00	30.0	18.41
56.0	21.73	0.28	0.37	35.0	21.42
59.0	30.40	0.37	0.27	37.0	23.16
65.5	58.16	2.32	0.18	38.0	24.08
80.0	62.80	0.88	0.13	40.0	26.76
100.0	66.21	0.27	0.11	42.0	30.55
200.0	68.63	0.84	0.11	43.5	34.75
300.0	66.02	1.31	0.13	44.0	36.49
400.0	58.70	0.68	0.14	46.0	45.02
600.0	55.94	0.48	0.17	48.5	51.73



## 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.
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