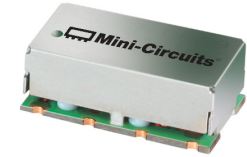


# Low Pass Filter

50Ω DC to 25 MHz

## SXLP-25+



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

### Maximum Ratings

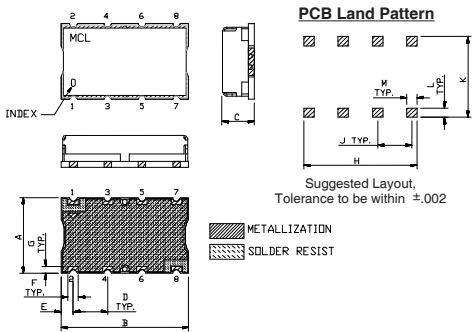
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

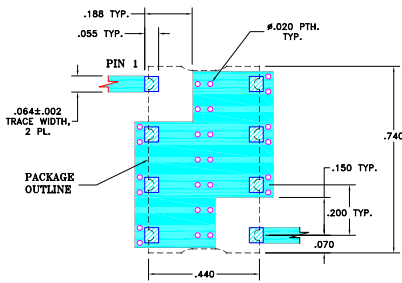


### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	wt.
.44	.74	.27	.200	.07	.060	1.02	16.76	5.08	11.94	1.40	1.52	3.0
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						

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

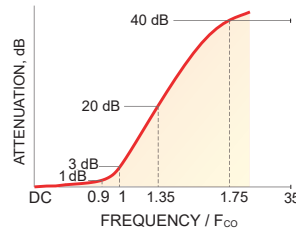
### Applications

- defense communications
- receivers / transmitters
- harmonic rejection

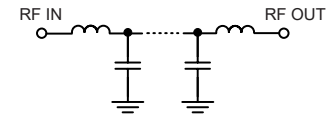
### Low Pass Filter Electrical Specifications (T<sub>AMB</sub> = 25°C)

PASSBAND (MHz)	f <sub>co</sub> , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 25	28	36 - 47	47 - 1000	1.7	18

### Typical Frequency Response

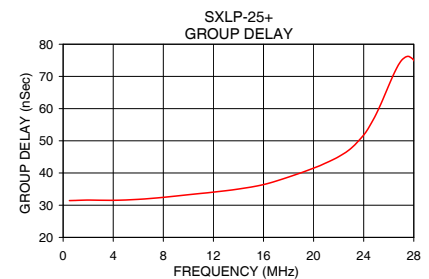
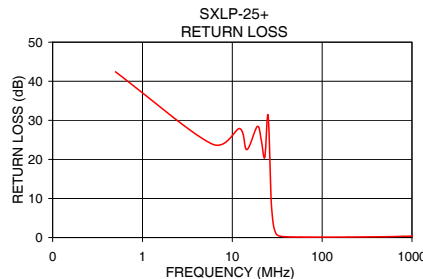


### Functional Schematic



### Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	$\bar{x}$	$\sigma$			
0.5	0.02	0.00	42.42	0.5	31.44
1.5	0.04	0.00	31.78	2.0	31.60
4.0	0.08	0.00	24.60	4.0	31.51
12.0	0.16	0.01	27.89	6.0	31.81
21.0	0.31	0.01	24.97	8.0	32.44
25.0	0.45	0.01	31.31	10.0	33.25
26.5	0.82	0.02	13.63	12.0	34.06
27.4	1.66	0.04	7.70	14.0	35.03
28.0	2.67	0.06	5.16	16.0	36.41
29.0	5.11	0.11	2.63	18.0	38.75
31.0	11.27	0.18	0.86	20.0	41.51
36.0	24.96	0.31	0.27	21.0	43.15
47.0	45.89	0.87	0.15	22.0	45.08
100.0	73.69	1.56	0.11	23.0	47.69
300.0	83.77	2.45	0.16	24.0	51.81
500.0	84.18	1.52	0.22	25.0	58.31
800.0	75.17	1.62	0.31	26.5	71.54
1000.0	68.20	1.94	0.37	28.0	74.97



### 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.
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