

Low Pass Filter

50Ω DC to 40 MHz

Maximum Ratings

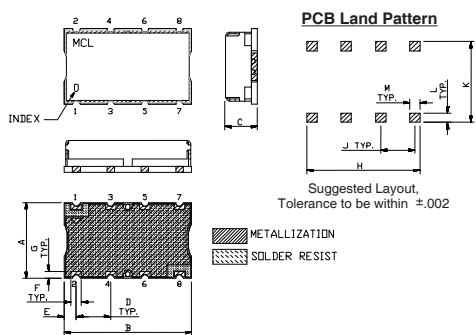
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

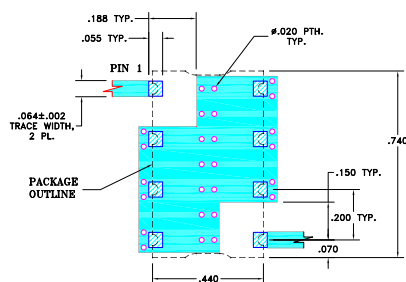


Outline Dimensions (inch/mm)

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)



1. TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025" ± .002". COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 2. 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

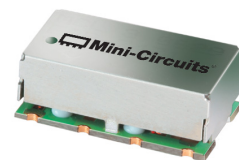
Features

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

Applications

- cable system (video & data)
- defense communications
- receivers / transmitters
- harmonic rejection

SXLP-40+



Generic photo used for illustration purposes only
CASE STYLE: HF1139

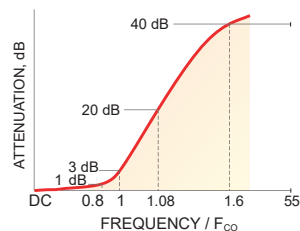
+RoHS Compliant

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

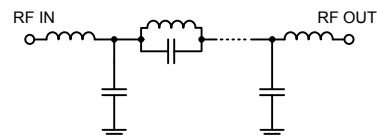
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)	VSWR (:1)
(Loss < 1dB)	(Loss 3dB)	(Loss > 20dB) (Loss > 40dB)	Passband Typ. Stopband Typ.
DC - 40	50	54 - 80 80 - 2750	1.3 18

Typical Frequency Response

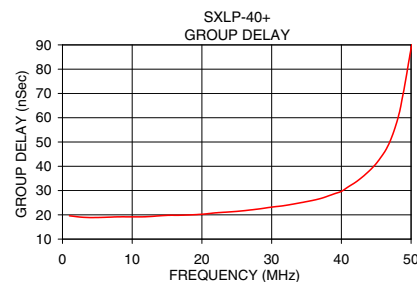
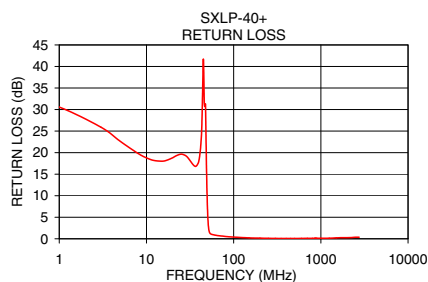


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
$\bar{x}$	σ			
0.5	0.24	0.01	1.0	19.59
5.0	0.29	0.01	3.0	18.97
25.0	0.42	0.01	5.0	18.91
35.0	0.59	0.02	10.0	19.17
40.0	0.67	0.03	12.0	19.22
49.0	1.89	0.09	15.0	19.77
50.0	3.45	0.29	17.0	19.85
50.4	4.71	0.41	20.0	20.23
51.0	7.08	0.60	22.0	20.83
52.0	12.33	0.83	25.0	21.43
53.0	18.80	0.97	30.0	23.18
54.0	27.01	1.19	35.0	25.45
80.0	47.43	0.45	37.0	26.71
100.0	62.54	0.44	39.0	28.69
200.0	84.33	3.23	40.0	29.68
600.0	86.91	3.37	41.0	31.55
1000.0	84.47	3.62	45.0	41.14
2000.0	62.71	0.64	48.0	58.69
2750.0	47.57	0.24	50.0	88.49



Notes

- A. 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.
- B. 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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