

Low Pass Filter

50Ω DC to 45 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.

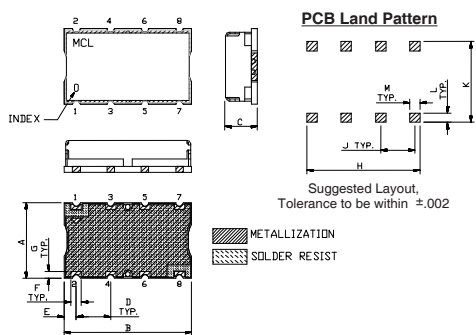
Pin Connections

INPUT 1

OUTPUT 8

GROUND 2, 3, 4, 5, 6, 7

Outline Drawing



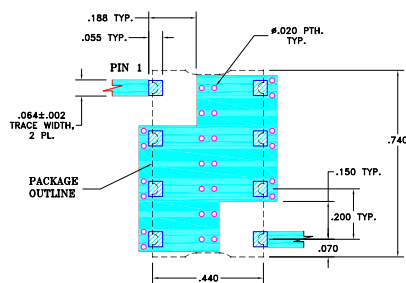
Outline Dimensions (inch/mm)

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

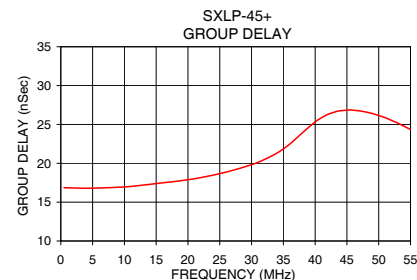
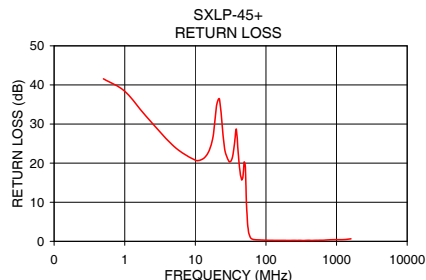
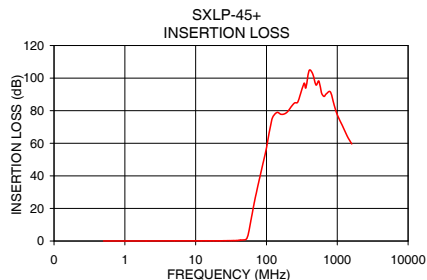
Demo Board MCL P/N: TB-368

Suggested PCB Layout (PL-230)



NOTE:

- 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.
 - 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



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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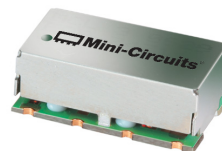
Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection

SXLP-45+

Generic photo used for illustration purposes only
CASE STYLE: HF1139

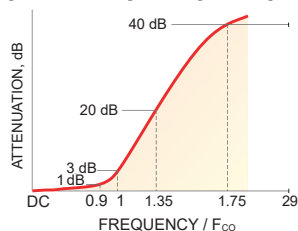
+RoHS Compliant

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

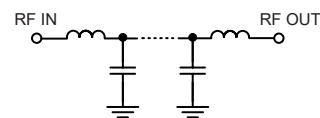
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 40dB)	Passband Typ.	Stopband Typ.
DC - 45	54	70 - 90	90 - 1600	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			
0.5	0.03	0.00	41.56	0.5	16.86
5.0	0.09	0.01	24.26	2.0	16.83
26.0	0.20	0.01	23.64	10.0	16.96
42.0	0.42	0.01	19.21	12.0	17.11
45.0	0.56	0.02	15.99	14.0	17.29
45.0	0.56	0.02	15.99	16.0	17.49
51.0	0.94	0.06	19.09	18.0	17.67
53.0	1.80	0.16	9.35	20.0	17.88
54.0	2.79	0.23	6.34	22.0	18.16
57.0	7.02	0.34	2.20	26.0	18.87
60.0	12.29	0.34	1.02	32.0	20.47
70.0	27.17	0.28	0.43	34.0	21.32
90.0	48.22	0.34	0.32	36.0	22.47
100.0	56.89	0.56	0.28	38.0	23.92
200.0	82.06	2.63	0.24	40.0	25.33
400.0	100.39	4.06	0.26	42.0	26.31
600.0	93.18	2.34	0.29	45.0	26.84
1000.0	82.80	4.51	0.44	49.0	26.40
1200.0	73.70	2.94	0.43	54.0	26.76
1600.0	63.66	2.85	0.65	55.0	24.35

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