

Low Pass Filter

SXLP-550+

50Ω DC to 550 MHz

Maximum Ratings

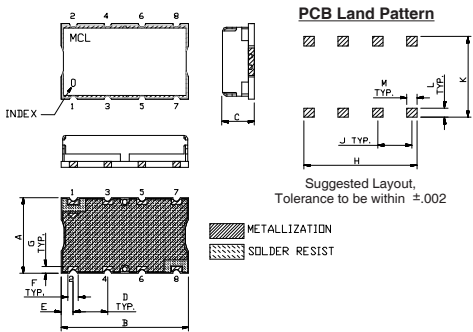
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

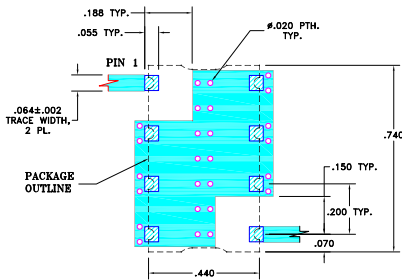


Outline Dimensions (inch/mm)

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

Note: Please refer to case style drawing for details

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

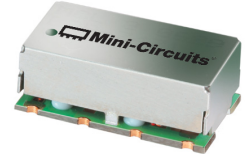


Features

- 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

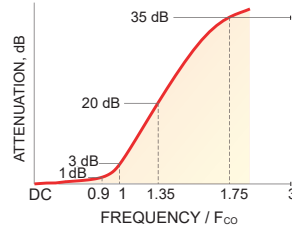
+RoHS Compliant

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

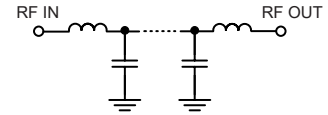
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 35dB)	Passband Typ.	Stopband Typ.
DC - 550	605	800 - 1050	1050 - 2000	1.2	18

Typical Frequency Response

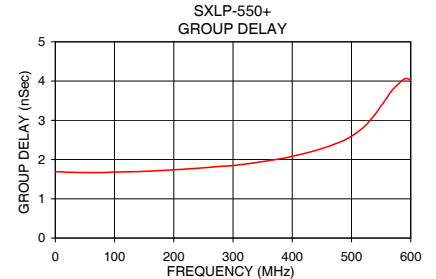
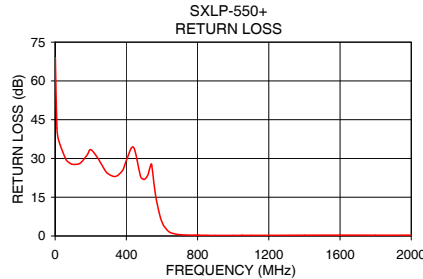
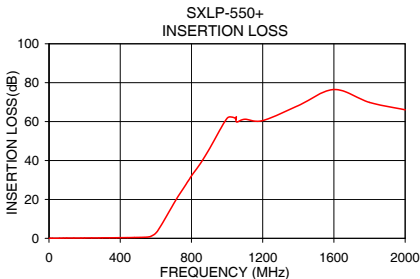


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
1.0	0.00	0.00	69.04	1.0	1.69
10.0	0.02	0.00	41.71	20.0	1.68
20.0	0.04	0.00	36.95	60.0	1.67
80.0	0.10	0.00	28.33	80.0	1.67
240.0	0.21	0.01	30.11	100.0	1.68
550.0	0.59	0.01	23.37	140.0	1.69
570.0	0.89	0.05	13.45	180.0	1.72
590.0	1.78	0.14	7.45	200.0	1.74
605.0	3.03	0.24	4.63	240.0	1.78
640.0	7.95	0.40	1.59	280.0	1.83
680.0	14.28	0.45	0.69	340.0	1.93
800.0	31.71	0.46	0.29	380.0	2.02
1000.0	62.20	2.05	0.23	400.0	2.09
1050.0	69.14	5.07	0.23	440.0	2.23
1100.0	65.76	2.92	0.24	500.0	2.60
1200.0	63.70	1.94	0.25	520.0	2.82
1400.0	69.58	1.57	0.29	530.0	2.97
1600.0	77.50	3.42	0.31	550.0	3.37
1800.0	71.54	3.52	0.31	570.0	3.79
2000.0	67.87	2.44	0.32	600.0	4.02



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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