

Low Pass Filter

SXLP-550A+

50Ω DC to 550 MHz

Maximum Ratings

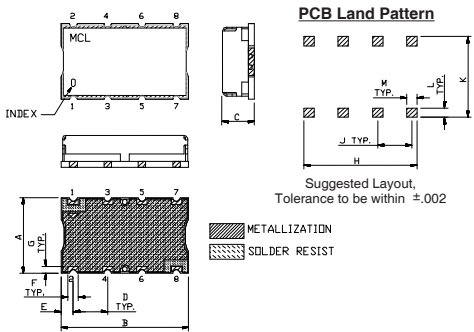
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W Max.

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

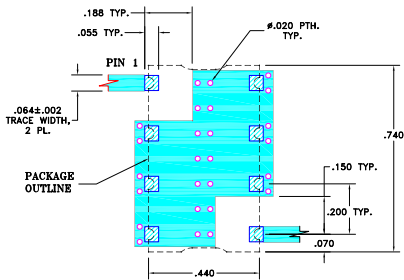


Outline Dimensions (inch/mm)

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	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)



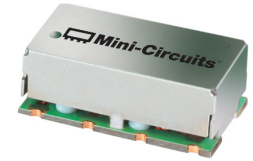
- NOTE:
- TRACE WIDTH IS SHOWN FOR FR4 WITH DIELECTRIC THICKNESS: .025"±.002". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
 - BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.
- DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
 - DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection of VCOs



Generic photo used for illustration purposes only
CASE STYLE: HF1139

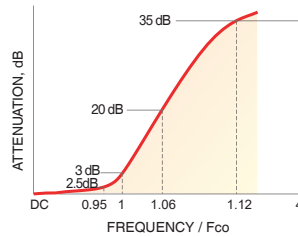
+RoHS Compliant

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

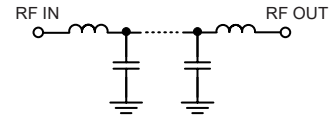
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)		VSWR (:1)	
		(Loss > 20dB)	(Loss > 35dB)	Passband Typ.	Stopband Typ.
(Loss < 2.5dB)	(Loss 3dB)	600 - 630	630 - 2300	1.2	18

Typical Frequency Response

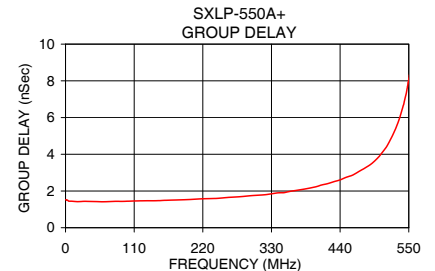
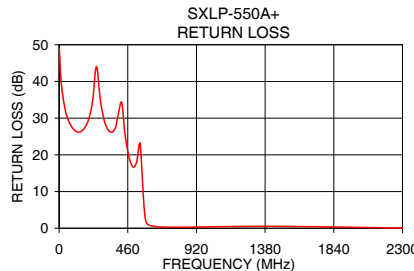
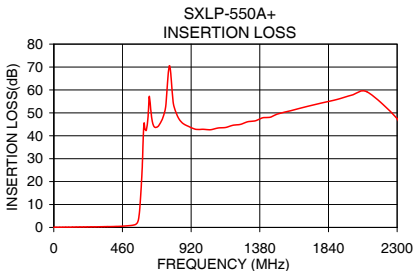


Functional Schematic



Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nSec)
	\bar{x}	σ			
1.0	0.04	0.00	49.01	1.0	1.52
5.0	0.04	0.00	45.66	5.0	1.45
100.0	0.12	0.00	26.84	10.0	1.45
200.0	0.20	0.01	29.99	50.0	1.42
300.0	0.28	0.01	29.70	100.0	1.44
400.0	0.40	0.01	31.87	200.0	1.54
500.0	0.76	0.05	16.63	300.0	1.75
550.0	1.40	0.07	18.97	350.0	1.91
565.0	2.91	0.43	8.26	380.0	2.09
570.0	4.57	0.76	5.26	400.0	2.22
580.0	11.75	1.30	2.09	420.0	2.40
590.0	22.97	1.69	1.19	450.0	2.75
600.0	40.09	3.19	0.89	460.0	2.86
630.0	47.32	1.40	0.56	480.0	3.26
700.0	44.19	0.64	0.33	500.0	3.79
800.0	54.50	1.63	0.27	510.0	4.21
1000.0	42.84	0.25	0.38	520.0	4.76
1400.0	47.86	0.22	0.53	530.0	5.49
1800.0	54.40	0.20	0.37	540.0	6.52
2000.0	57.81	0.46	0.23	545.0	7.18
2300.0	47.46	1.48	0.06	550.0	8.08



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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