

Low Pass Filter

SXLP-30+

50Ω DC to 30 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.

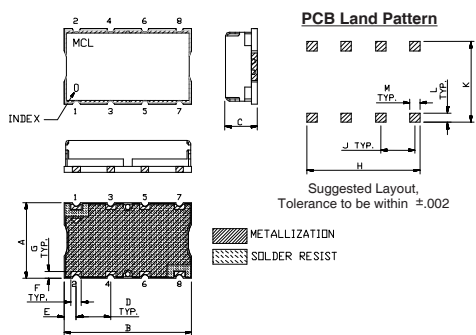
Pin Connections

INPUT 1

OUTPUT 8

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

Outline Drawing

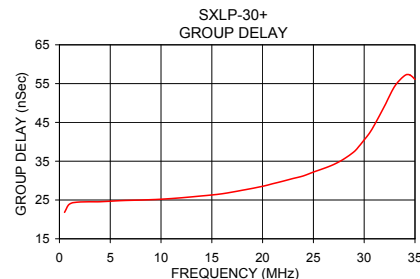
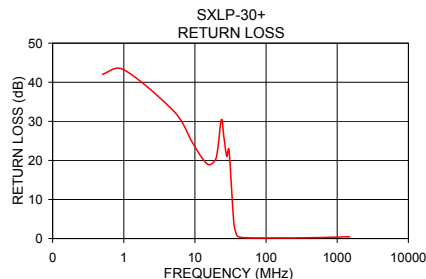
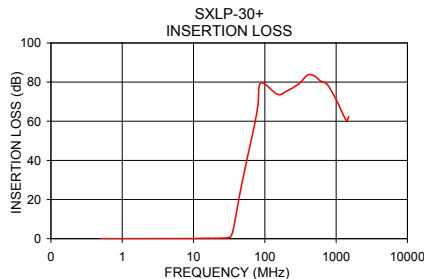
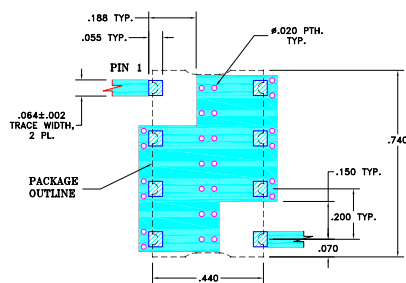


Outline Dimensions (inch mm)

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

Demo Board MCL P/N: TB-368

Suggested PCB Layout (PL-230)

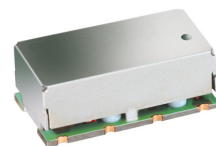


Features

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

Applications

- defense communications
- receivers / transmitters
- harmonic rejection



CASE STYLE: HF1139

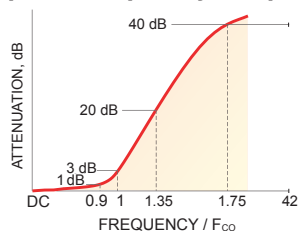
+RoHS Compliant

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

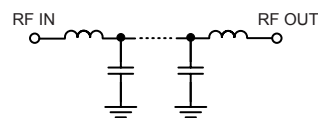
Low Pass Filter Electrical Specifications (T_{AMB} = 25°C)

PASSBAND (MHz)	f _{co} , MHz Nom.	STOPBAND (MHz)	VSWR (:1)
(Loss < 1dB)	(Loss 3dB)	(Loss > 20dB) (Loss > 40dB)	Passband Typ. Stopband Typ.
DC - 30	35	47 - 61 61 - 1500	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	0.01	0.01	0.5	21.81
1.5	0.02	0.00	2.0	24.48
3.0	0.04	0.00	6.0	24.84
8.0	0.08	0.00	8.0	24.98
13.0	0.16	0.01	10.0	25.20
26.0	0.31	0.01	12.0	25.56
30.0	0.45	0.01	14.0	26.05
33.0	0.96	0.03	16.0	26.60
34.0	1.70	0.04	18.0	27.51
35.0	2.97	0.06	20.0	28.54
36.0	4.77	0.10	22.0	29.85
38.0	9.25	0.17	23.0	30.55
42.0	18.19	0.26	24.0	31.20
47.0	27.53	0.33	25.0	32.21
61.0	47.11	0.55	26.0	33.11
100.0	74.33	2.07	27.0	34.15
400.0	81.35	2.33	28.0	35.56
800.0	78.11	1.32	30.0	40.49
1200.0	66.61	1.54	33.0	54.30
1500.0	60.60	1.50	35.0	56.10

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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