

Surface Mount Low Pass Filter

SCLF-5+

50Ω DC to 5 MHz

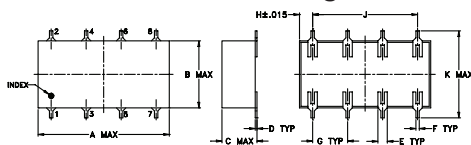
Maximum Ratings

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.	

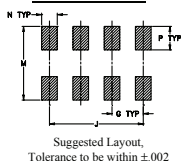
Pin Connections

INPUT	1
OUTPUT	8
GROUND	2,3,4,5,6,7

Outline Drawing



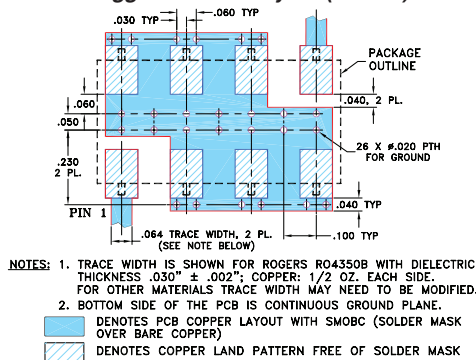
PCB Land Pattern



Outline Dimensions (inch)

A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08
H	J	K	M	N	P	wt
0.075	0.6	0.45	0.47	0.1	0.15	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.60

Demo Board MCL P/N: TB-187+ Suggested PCB Layout (PL-049)



Features

- wide selection of cut-off frequencies
- excellent rejection
- custom models available

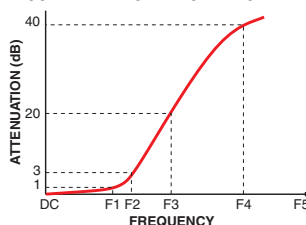
Applications

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

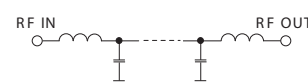
Electrical Specifications

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit
Pass Band	Insertion Loss	DC-F1	DC-5	—	—	1.0 dB
	Freq. Cut-Off	F2	5.8	—	3.0	dB
	VSWR	DC-F1	DC-5	—	1.7	:1
Stop Band	Rejection Loss	F3-F4	8-10	—	—	dB
		F4-F5	10-200	—	—	dB
	VSWR	F3-F5	8-200	—	18	:1

Typical Frequency Response

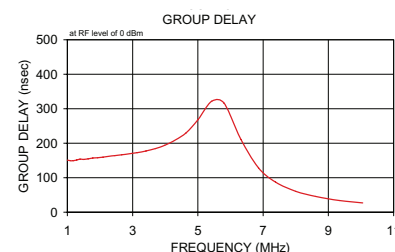
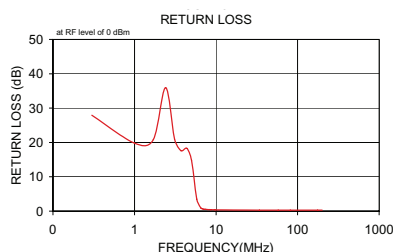
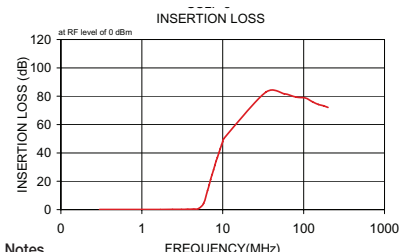


Electrical Schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	$\bar{x}$	σ		
0.30	0.05	0.00	27.93	150.94
1.00	0.11	0.01	19.79	149.44
1.70	0.13	0.01	20.83	149.56
2.40	0.15	0.00	35.97	151.58
3.10	0.24	0.02	20.96	153.73
3.70	0.34	0.04	17.62	153.16
4.40	0.44	0.02	18.29	154.81
5.00	0.71	0.05	14.82	157.02
5.80	4.39	0.64	3.50	157.96
6.50	13.41	0.69	0.92	159.54
6.80	17.44	0.61	0.69	161.84
7.10	21.22	0.55	0.59	163.94
7.40	24.76	0.52	0.53	166.34
7.70	28.06	0.49	0.49	169.53
8.00	31.17	0.48	0.46	172.46
8.30	34.08	0.47	0.44	177.65
8.60	36.83	0.46	0.42	184.69
9.00	40.28	0.44	0.40	193.77
9.30	42.71	0.42	0.39	209.32
9.70	45.76	0.39	0.38	230.37
10.00	47.94	0.39	0.38	267.85
10.30	50.00	0.45	0.37	321.82
34.00	82.82	4.44	0.27	316.39
57.70	81.71	2.14	0.28	210.99
81.40	79.29	0.47	0.28	128.64
105.20	78.72	1.24	0.28	87.23
128.90	76.10	1.22	0.28	60.47
152.60	74.23	1.04	0.27	45.55
176.30	73.30	0.56	0.27	33.91
200.00	72.10	0.48	0.27	26.94



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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