

Surface Mount Low Pass Filter

50Ω DC to 5 MHz

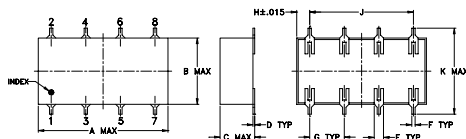
Maximum Ratings

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

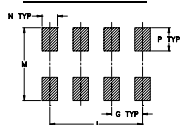
Pin Connections

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

Outline Drawing



PCB Land Pattern



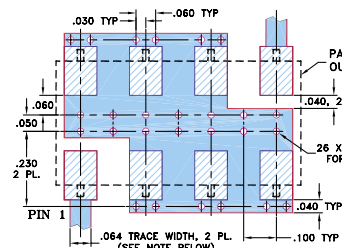
Suggested Layout,
Tolerance to be within ± 0.02

Outline Dimensions (inch)

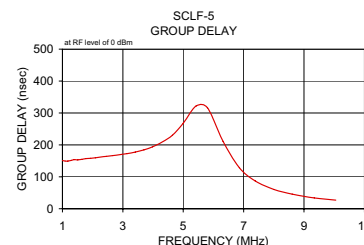
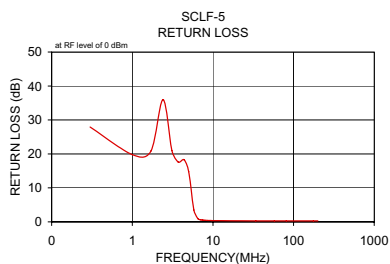
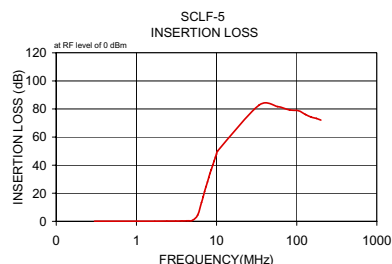
A	B	C	D	E	F	G
0.75	0.38	0.28	0.01	0.05	0.02	0.2
19.05	9.65	7.11	0.25	1.27	0.51	5.08

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)



- NOTES: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350B WITH DIELECTRIC THICKNESS .030" $\pm$.002"; COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.
2. 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

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

Applications

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



CASE STYLE: YY161

PRICE: \$14.95 ea. QTY (1-9)

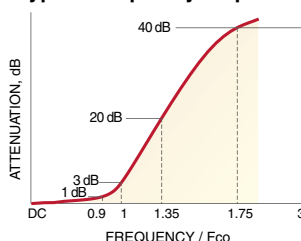
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

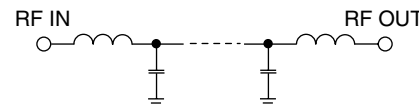
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco, (MHz) Nom.	STOPBAND (MHz)	VSWR (:1)
(loss < 1 dB)	(loss 3 dB)	(loss > 20 dB) (loss > 40 dB)	Pass band Typ. Stop band Typ.
DC-5	5.8	8-10 10-200	1.7 18

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	
1.00	0.11	0.01	19.79	
1.70	0.13	0.01	20.83	
2.40	0.15	0.00	35.97	
3.10	0.24	0.02	20.96	
3.70	0.34	0.04	17.62	
4.40	0.44	0.02	18.29	
5.00	0.71	0.05	14.82	
5.80	4.39	0.64	3.50	
6.50	13.41	0.69	0.92	
6.80	17.44	0.61	0.69	
7.10	21.22	0.55	0.59	
7.40	24.76	0.52	0.53	
7.70	28.06	0.49	0.49	
8.00	31.17	0.48	0.46	
8.30	34.08	0.47	0.44	
8.60	36.83	0.46	0.42	
9.00	40.28	0.44	0.40	
9.30	42.71	0.42	0.39	
9.70	45.76	0.39	0.38	
10.00	47.94	0.39	0.38	
10.30	50.00	0.45	0.37	
34.00	82.82	4.44	0.27	
57.70	81.71	2.14	0.28	
81.40	79.29	0.47	0.28	
105.20	78.72	1.24	0.28	
128.90	76.10	1.22	0.28	
152.60	74.23	1.04	0.27	
176.30	73.30	0.56	0.27	
200.00	72.10	0.48	0.27	

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