

Surface Mount Low Pass Filter

SCLF-8+ SCLF-8

50Ω DC to 8 MHz

Maximum Ratings

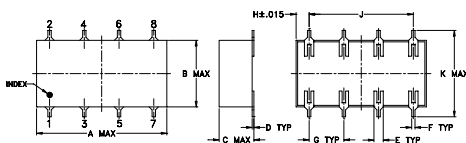
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

Permanent damage may occur if any of these limits are exceeded.

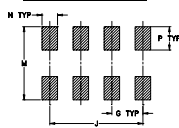
Pin Connections

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

Outline Drawing



PCB Land Pattern

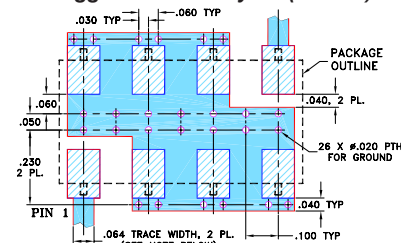


Suggested Layout,
Tolerance to be within ±0.02

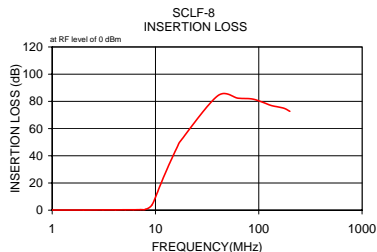
Outline Dimensions (inch/mm)

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" ± .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: \$12.95 ea. QTY (1-9)

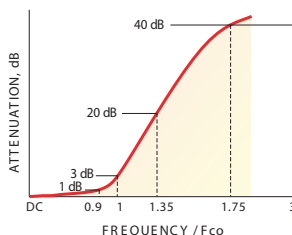
+ RoHS compliant in accordance
with EU Directive (2002/95/EC)

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

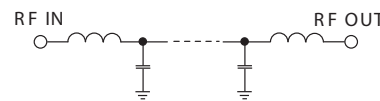
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	f _{co} , (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-8	9.2	12.5-16.5 16.5-200	1.7 18

typical frequency response

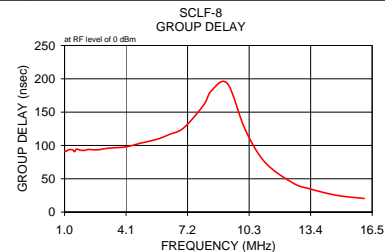


Electrical Schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)	Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
1.00	0.10	40.10	1.00	91.50
2.00	0.10	33.40	1.10	91.70
3.10	0.20	25.90	1.20	93.50
4.10	0.20	22.90	1.40	93.60
5.10	0.30	24.30	1.50	90.70
6.10	0.30	31.00	1.60	94.50
7.20	0.40	26.50	1.80	92.90
8.00	0.60	22.40	2.00	92.60
9.20	3.60	4.00	2.20	94.00
10.40	12.70	1.10	2.40	93.60
10.80	15.90	1.10	2.70	93.50
11.20	18.90	1.10	2.90	94.60
11.70	22.40	1.10	3.30	96.10
12.10	25.00	1.10	3.60	96.70
12.50	27.50	1.00	4.00	97.50
12.90	29.90	1.00	4.40	99.90
13.60	33.90	1.00	4.80	103.20
14.30	37.50	1.00	5.20	105.90
15.10	41.40	1.00	5.80	110.60
15.80	44.50	1.00	6.30	116.80
16.50	47.50	1.00	7.00	126.30
17.20	50.20	0.90	8.00	160.20
40.10	84.10	6.10	8.40	182.20
62.90	82.30	3.00	9.20	193.10
85.80	81.80	3.90	10.10	124.10
108.60	79.40	2.00	11.10	74.80
131.50	77.00	1.90	12.50	43.80
154.30	75.90	2.00	13.40	34.60
177.20	74.80	1.50	14.70	25.30
200.00	72.70	1.10	16.10	20.40



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