

Surface Mount Low Pass Filter

SCLF-10+ SCLF-10

50Ω DC to 10 MHz

Maximum Ratings

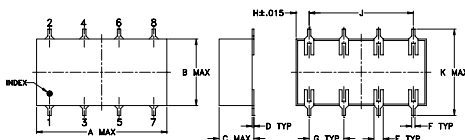
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
RF Power Input	0.5W max.

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

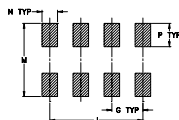
Pin Connections

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

Outline Drawing



PCB Land Pattern



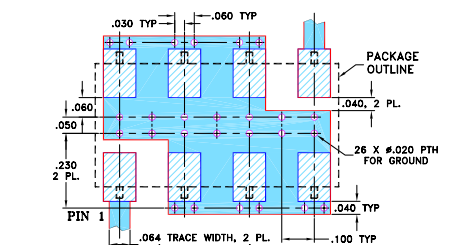
Suggested Layout,
Tolerance to be within ±.002

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" ± .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: \$8.95 ea. QTY (1-9)

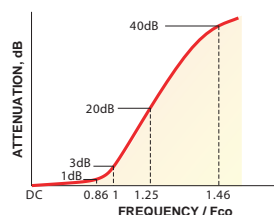
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

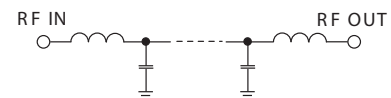
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco, (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Pass band Typ.	Stop band Typ.
DC-10	12.2	14.0-16.0	16.0-230	1.20	18

typical frequency response



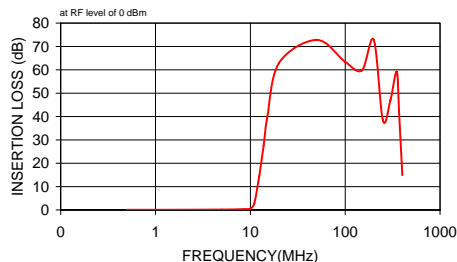
Electrical Schematic



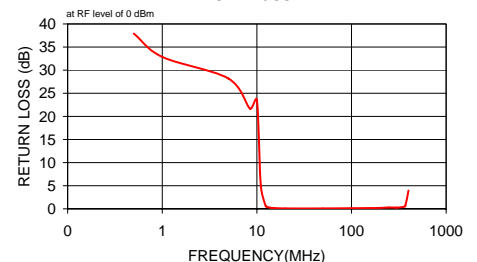
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)
	\bar{x}	σ	
0.50	0.06	0.00	37.92
1.00	0.07	0.00	32.86
5.00	0.17	0.00	28.19
8.50	0.35	0.01	21.64
10.00	0.56	0.01	23.57
11.00	2.70	0.10	5.02
12.40	14.39	0.33	0.59
12.60	16.31	0.35	0.48
13.80	27.59	0.45	0.25
15.00	39.05	0.65	0.18
20.00	62.85	0.71	0.09
50.00	72.81	1.31	0.09
100.00	63.39	0.90	0.13
150.00	59.75	0.82	0.16
200.00	72.82	4.08	0.19
250.00	38.33	0.93	0.29
300.00	47.06	0.58	0.26
350.00	59.23	1.29	0.40
370.00	42.02	0.85	0.61
400.00	14.91	0.74	3.95

SCLF-10 INSERTION LOSS



SCLF-10 RETURN LOSS



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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