

Surface Mount Low Pass Filter

SCLF-1000+ SCLF-1000

50Ω DC to 1000 MHz

Maximum Ratings

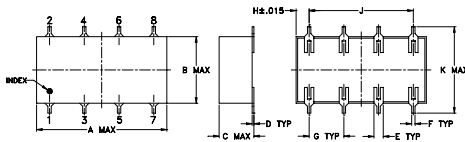
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

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

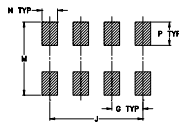
Pin Connections

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

Outline Drawing



PCB Land Pattern

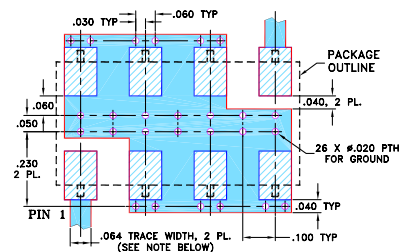


Suggested Layout,
Tolerance to be within ±0.02

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)

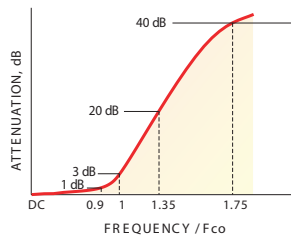
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

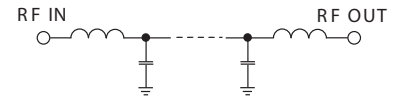
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	f _{co} , (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB)	(loss > 40 dB)	Pass band Typ.	Stop band Typ.
DC-1000 (loss < 1 dB)	1200 (loss 3 dB)	1620-2100 (loss > 20 dB)	2100-2500 (loss > 40 dB)	1.7	18

typical frequency response

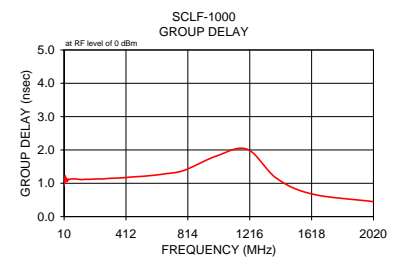
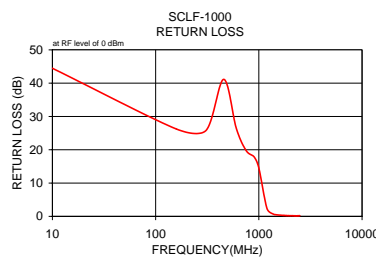
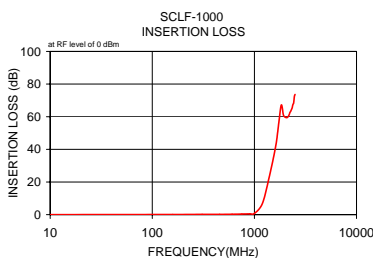


Electrical Schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
10.00	0.00	0.00	44.50	10.00	0.90
158.80	0.10	0.00	26.20	12.00	1.10
307.50	0.20	0.00	25.80	14.40	1.00
456.30	0.20	0.00	41.20	17.20	1.20
605.00	0.30	0.00	26.40	20.70	1.10
753.80	0.40	0.00	19.80	24.70	1.20
902.50	0.50	0.00	17.80	29.60	1.10
1000.00	0.80	0.10	14.60	35.50	1.10
1200.00	7.00	1.50	2.30	42.50	1.10
1400.00	23.40	1.76	0.60	50.90	1.10
1444.00	27.10	1.78	0.50	61.00	1.10
1488.00	30.80	1.80	0.50	73.10	1.10
1532.00	34.50	1.90	0.40	87.60	1.10
1576.00	38.40	2.00	0.40	104.90	1.10
1620.00	42.40	2.30	0.40	125.70	1.10
1664.00	46.80	2.60	0.30	150.50	1.10
1751.20	58.50	4.40	0.30	180.30	1.10
1838.40	67.20	4.00	0.20	216.00	1.10
1925.60	60.90	1.90	0.20	258.70	1.10
2012.80	59.60	1.40	0.20	313.40	1.20
2106.00	59.60	1.30	0.20	375.50	1.20
2188.00	61.20	1.10	0.20	454.90	1.20
2227.00	62.60	1.40	0.20	544.90	1.20
2266.00	63.30	1.60	0.20	660.10	1.30
2305.00	64.30	1.50	0.20	790.70	1.40
2344.00	65.40	1.90	0.20	1000.00	1.80
2383.00	67.40	2.50	0.20	1200.00	2.00
2422.00	68.40	1.70	0.20	1390.20	1.20
2461.00	72.40	4.90	0.20	1620.00	0.70
2500.00	73.60	3.40	0.20	2017.50	0.50



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED
The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

For detailed performance specs & shopping online see web site

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

Notes: 1. Performance and quality attributes and conditions not expressly stated in this specification sheet are intended to be excluded and do not form a part of this specification sheet. 2. Electrical specifications and performance data contained herein are based on Mini-Circuits' applicable established test performance criteria and measurement instructions. 3. The parts covered by this specification sheet are subject to Mini-Circuits standard limited warranty and terms and conditions (collectively, "Standard Terms"); Purchasers of this part are entitled to the rights and benefits contained therein. For a full statement of the Standard Terms and the exclusive rights and remedies thereunder, please visit Mini-Circuits' website at www.minicircuits.com/MCLStore/terms.jsp.

REV. D
M111708
SCLF-1000
070716