

# Surface Mount Low Pass Filter

50Ω DC to 1000 MHz

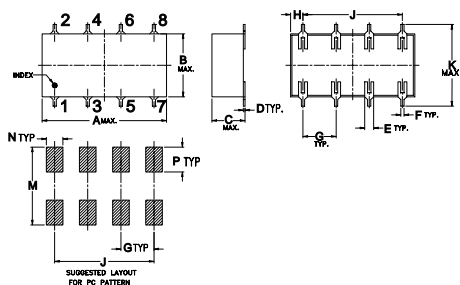
## Maximum Ratings

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

## Pin Connections

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

## Outline Drawing



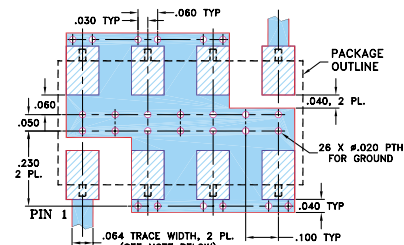
## Outline Dimensions (inch)

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

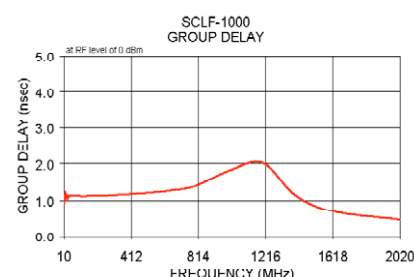
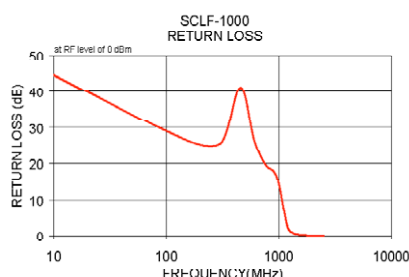
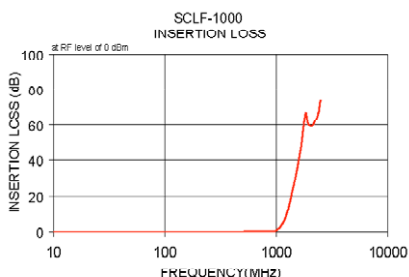
  

H	J	K	M	N	P	wt
0.07	0.6	0.45	0.47	0.1	0.15	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.60

## 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.
3. DENOTES PCB COPPER LAYOUT WITH SMOBC (SOLDER MASK OVER BARE COPPER)
4. DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



# SCLF-1000+ SCLF-1000



CASE STYLE: YY161  
PRICE: \$12.95 ea. QTY (1-9)

## Features

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

## Applications

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

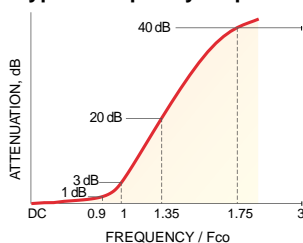
+ RoHS compliant in accordance  
with EU Directive (2002/95/EC)

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

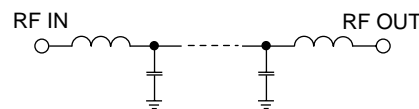
## Low Pass Filter Electrical Specifications

PASSBAND (MHz)	f <sub>co</sub> , (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-1000	1200	1620-2100 2100-2500	1.7 18

## typical frequency response



## electrical schematic



## Typical Performance Data

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

**Mini-Circuits®**

INTERNET <http://www.minicircuits.com>

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

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

REV. C  
M98898  
SCLF-1000  
060515