

Surface Mount Low Pass Filter

SCLF-10.7+ SCLF-10.7

50Ω DC to 11 MHz

Maximum Ratings

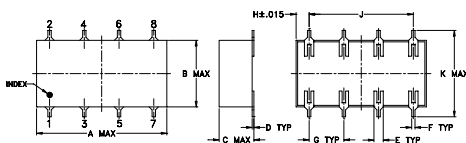
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

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

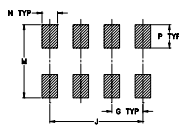
Pin Connections

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

Outline Drawing



PCB Land Pattern

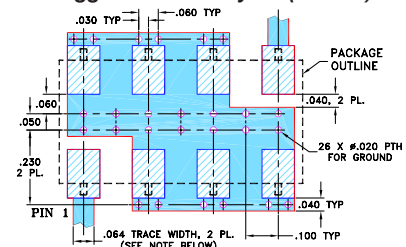


Suggested Layout,
Tolerance to be within ±0.02

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)

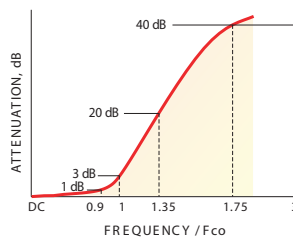
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

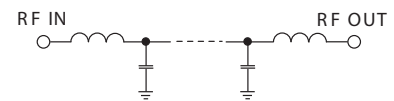
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco, (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)		
		(loss < 1 dB)	(loss > 20 dB)	(loss > 40 dB)	Pass band Typ.	Stop band Typ.
DC-11	14		19-24	24-200	1.7	18

typical frequency response

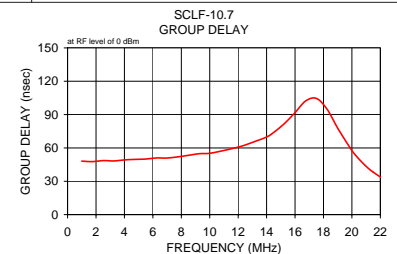
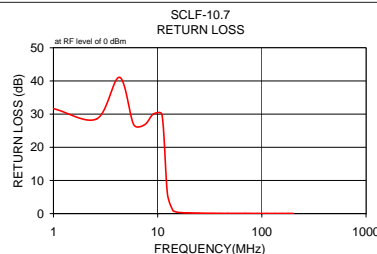
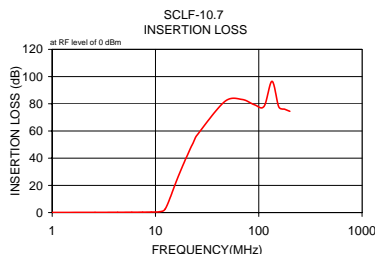


Electrical Schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)	Frequency (MHz)	Group Delay (nsec)
	\bar{x}	σ			
1.00	0.08	0.00	31.64	1.00	48.1
2.60	0.13	0.00	28.56	1.75	47.7
4.30	0.18	0.00	41.09	2.50	48.6
5.90	0.24	0.01	26.82	3.25	48.3
7.50	0.31	0.01	26.80	4.00	49.2
9.10	0.40	0.01	30.03	4.75	49.7
11.00	0.64	0.02	29.83	5.50	50.0
12.40	2.53	0.24	6.13	6.25	51.0
14.00	11.64	0.45	0.93	7.00	50.9
14.50	14.82	0.45	0.65	7.75	51.9
15.40	20.14	0.43	0.43	8.50	53.3
16.30	24.95	0.40	0.33	9.25	54.8
17.20	29.31	0.39	0.28	10.00	55.2
18.10	33.33	0.38	0.25	11.00	57.7
19.00	37.05	0.37	0.22	11.50	59.2
19.50	38.99	0.38	0.22	12.25	61.6
20.40	42.29	0.36	0.20	13.00	65.0
21.30	45.46	0.36	0.19	14.00	69.8
22.20	48.48	0.40	0.17	14.50	74.0
23.10	51.09	0.34	0.16	15.25	81.9
24.00	53.92	0.49	0.15	16.00	91.7
25.00	56.48	0.64	0.14	16.75	102.3
46.90	81.67	4.73	0.09	17.50	104.5
68.80	83.17	5.36	0.08	18.25	94.9
90.60	79.31	1.74	0.07	19.00	77.8
112.50	78.10	2.32	0.06	19.75	62.5
134.40	96.52	45.46	0.07	20.25	53.5
156.30	77.69	2.10	0.07	21.00	43.4
178.10	76.01	0.73	0.06	21.50	38.2
200.00	74.48	2.60	0.06	22.25	31.8



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 The Design Engineers Search Engine Provides ACTUAL Data Instantly at minicircuits.com

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