

Surface Mount Low Pass Filter

SCLF-65+ SCLF-65

50Ω DC to 65 MHz

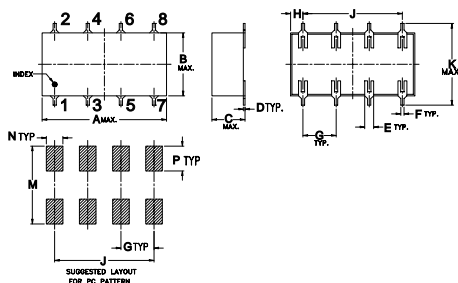
Maximum Ratings

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

Pin Connections

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

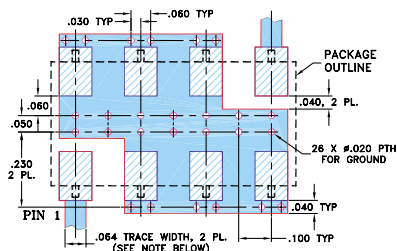
Outline Drawing



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
0.07	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.
- 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: \$11.45 ea. QTY (1-9)

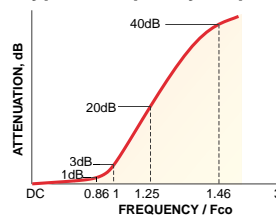
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

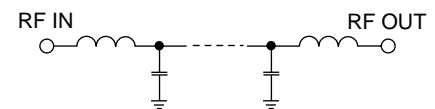
Low Pass Filter Electrical Specifications

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-65	71	86-96	96-510	1.3	18

typical frequency response



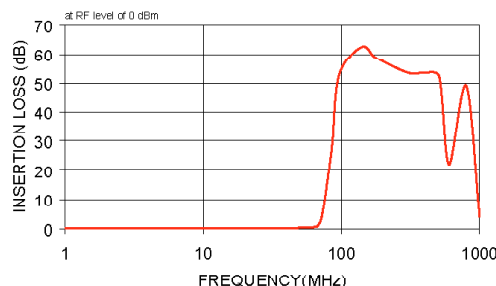
electrical schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)
	\bar{x}	σ	
1.00	0.03	0.00	44.37
20.00	0.10	0.00	23.19
30.00	0.12	0.01	28.62
40.00	0.17	0.00	31.38
60.00	0.45	0.01	25.03
65.00	0.65	0.02	28.17
67.00	0.88	0.05	18.31
71.00	2.86	0.26	5.83
75.00	8.55	0.56	1.65
82.00	21.71	0.71	0.44
86.00	29.33	0.78	0.32
96.00	52.71	2.06	0.21
140.00	62.52	1.00	0.16
180.00	58.61	0.65	0.15
300.00	53.64	0.36	0.20
400.00	53.53	0.32	0.21
510.00	52.19	0.80	0.24
600.00	22.14	0.44	0.76
800.00	49.13	0.65	0.28
1,000.00	3.96	0.08	8.74

SCLF-65 INSERTION LOSS



SCLF-65 RETURN LOSS

