

Surface Mount Low Pass Filter

SALF-396+ SALF-396

50Ω DC to 396 MHz

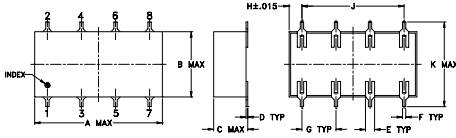
Maximum Ratings

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

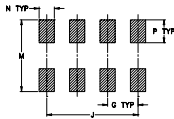
Pin Connections

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

Outline Drawing



PCB Land Pattern

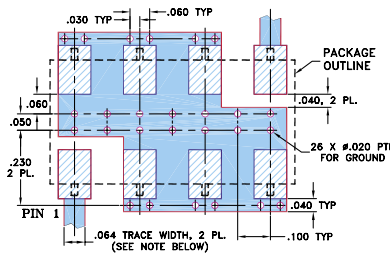


Suggested Layout,
Tolerance to be within ±0.02

Outline Dimensions (inch/mm)

A	B	C	D	E	F	G
.75	.38	.20	.010	.050	.020	.200
19.05	9.65	5.08	0.25	1.27	0.51	5.08
H	J	K	M	N	P	wt
.075	.600	.450	.470	.100	.150	grams
1.91	15.24	11.43	11.94	2.54	3.81	1.6

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

- 7-section elliptic function
- excellent rejection

Applications

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



CASE STYLE: YY101
PRICE: \$6.95 ea. QTY (1-9)

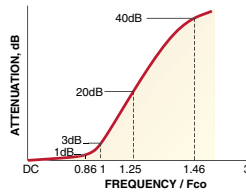
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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 < 1 dB)	(loss > 3 dB) Typ.	(loss > 20 dB) Min.	(loss > 35 dB) Min.	Pass band typ.
DC-396	458	570-620	620-1430	1.3	18

typical frequency response



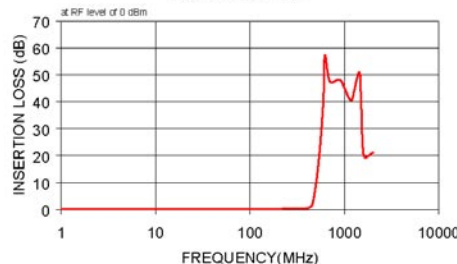
Electrical Schematic



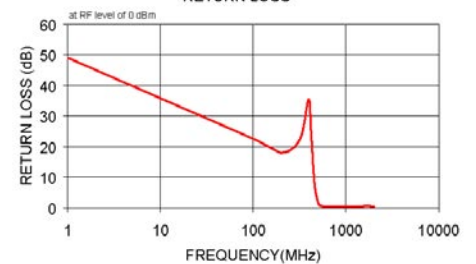
Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)
	\bar{x}	σ	
100	0.15	0.00	22.44
200	0.27	0.00	17.96
320	0.35	0.01	22.46
396	0.51	0.01	35.39
420	0.66	0.02	25.04
458	1.95	0.19	7.92
505	10.58	0.60	1.23
540	19.96	0.78	0.53
565	27.57	1.00	0.43
600	41.32	2.14	0.35
620	57.20	5.41	0.34
700	47.53	0.98	0.32
900	48.13	0.53	0.30
1100	41.85	0.37	0.30
1200	40.69	0.38	0.34
1430	50.93	1.56	0.26
1505	39.15	1.05	0.32
1600	19.94	1.20	0.52
2000	21.19	0.18	0.42

SALF-396
INSERTION LOSS



SALF-396
RETURN LOSS



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RF/IF MICROWAVE COMPONENTS

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