

Surface Mount Low Pass Filter

SALF-146+ SALF-146

50Ω DC to 146 MHz

Maximum Ratings

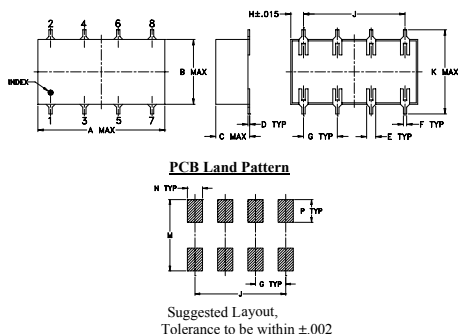
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

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

Pin Connections

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

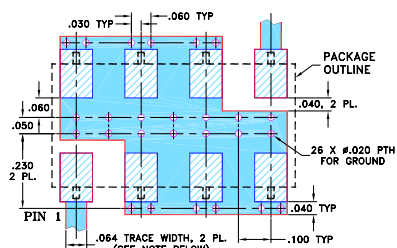
Outline Drawing



Outline Dimensions (inch)

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)

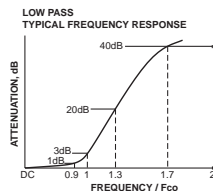
+ RoHS compliant in accordance with EU Directive (2002/95/EC)

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

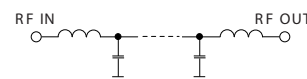
Low Pass Filter Electrical Specifications

PASSBAND (MHz)	fco, (MHz) Nom.	STOPBAND (MHz)		VSWR (:1)	
		(loss > 20 dB) Min.	(loss > 40 dB) Min.	Pass band typ.	Stop band typ.
(loss < 1 dB)	(loss 3 dB) Typ.				
DC-146	171	210-240	240-850	1.5	18

typical frequency response

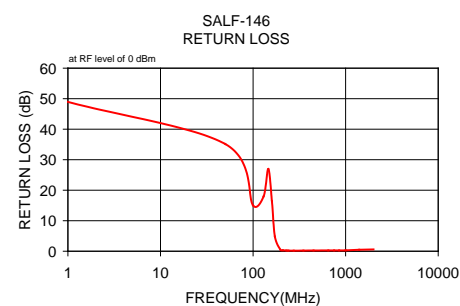
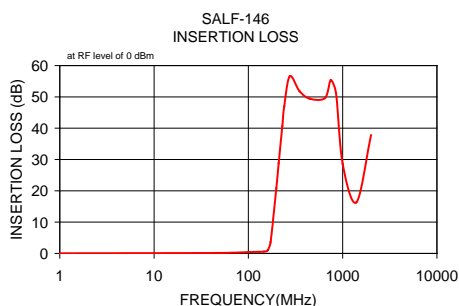


Electrical Schematic



Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)
	\bar{x}	σ	
1.00	0.02	0.00	48.94
50.00	0.16	0.00	35.16
100.00	0.42	0.01	15.01
130.00	0.49	0.01	17.99
146.00	0.59	0.01	26.96
160.00	0.98	0.06	16.42
172.00	3.57	0.32	4.81
198.00	20.81	0.51	0.46
210.00	28.81	0.51	0.31
229.00	40.63	0.55	0.24
240.00	46.92	0.54	0.22
275.00	56.59	0.32	0.20
350.00	51.77	0.33	0.21
450.00	49.41	0.32	0.24
650.00	49.65	0.45	0.26
750.00	55.39	0.95	0.26
850.00	51.19	0.76	0.27
1000.00	28.61	0.64	0.30
1400.00	16.34	1.21	0.48



Mini-Circuits
ISO 9001 ISO 14001 AS 9100 CERTIFIED

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

IF/RF MICROWAVE COMPONENTS

For detailed performance specs & shopping online see web site

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-Circuit's 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. C
M111708
SALF-146
090820