

# Surface Mount Low Pass Filter

# SALF-325+ SALF-325

50Ω DC to 325 MHz

## Maximum Ratings

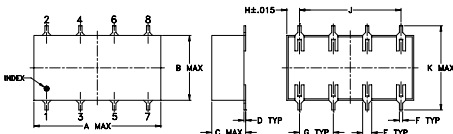
Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C
Power Input	0.5W max.

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

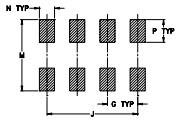
## Pin Connections

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

## Outline Drawing



### PCB Land Pattern

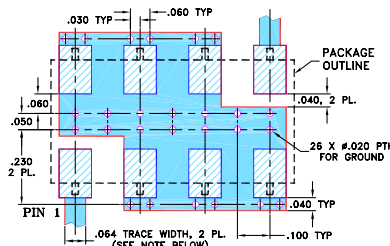


Suggested Layout,  
Tolerance to be within ±0.02

## Outline Dimensions (inch)

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

### Notes

- A. Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.  
B. Electrical specifications and performance data contained in this specification document are based on Mini-Circuit's applicable established test performance criteria and measurement instructions.  
C. The parts covered by this specification document are subject to Mini-Circuit's 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-Circuit's website at [www.minicircuits.com/MCLStore/terms.jsp](http://www.minicircuits.com/MCLStore/terms.jsp)

## Features

- 7-section elliptic function
- excellent rejection

## Applications

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



CASE STYLE: YY101

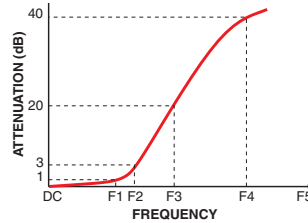
### +RoHS Compliant

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

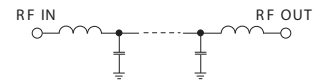
## Electrical Specifications

Parameter	F#	Frequency (MHz)	Min.	Typ.	Max.	Unit	
Pass Band	Insertion Loss	DC-F1	DC-325	—	—	1.0	dB
	Freq. Cut-Off	F2	383	—	3.0	—	dB
	VSWR	DC-F1	DC-325	—	1.3	—	:1
Stop Band	Rejection Loss	F3-F4	480-580	20	—	—	dB
		F4-F5	580-1250	40	—	—	dB
	VSWR	F3-F5	480-1250	—	18	—	:1

## Typical Frequency Response



## Electrical Schematic



## Typical Performance Data

Frequency (MHz)	Insertion Loss (dB)		Return Loss (dB)
	$\bar{x}$	$\sigma$	
1	0.03	0.00	49.25
100	0.14	0.00	24.56
200	0.25	0.00	24.79
325	0.53	0.01	32.09
383	2.48	0.15	6.52
450	20.40	0.39	0.41
480	28.51	0.42	0.33
540	40.90	0.45	0.23
580	45.61	0.44	0.22
650	47.49	0.43	0.23
775	45.50	0.45	0.18
900	44.43	0.49	0.20
1150	48.25	1.01	0.19
1240	61.59	3.99	0.19
1300	50.26	1.97	0.20
1400	35.73	0.73	0.22
1500	25.20	0.88	0.30
1700	19.14	0.76	0.37
2000	34.41	0.57	0.38

